

STIC Search Report

STIC Database Tracking Number: 136622

TO: Michael B Holmes

Location: 5A49 Art Unit : 2121

Wednesday, November 03, 2004

Case Serial Number: 09/853191

From: Terese Esterheld

Location: EIC 2100

RND 4B28

Phone: 571-272-3524

Terese.esterheld@uspto.gov

Search Notes

Dear Examiner Holmes,

Attached, please find the results of your search request for application 09/853191. I have concentrated on finding information on Visual and textual feature vectors, Visual and textual modalities, Concatenated, Disparate modalities.

Items have been marked that may be of value to you. Please look over the complete package as other items may also be of use.

Please let me know if you need additional information on this search.

Thank you for coming to EIC 2100.

Terese Esterheld



Set	Items	Description
s1	51	AU='BOLLE R' OR AU='BOLLE R M' OR AU='BOLLE RUDOLF M':AU='-
	ВС	DLLE RUDOLF MARTEN'
s2	26	AU='HAAS N' OR AU='HAAS N C' OR AU='HAAS N F' OR AU='HAAS -
	NC	DRMAN' OR AU='HAAS NORMAN C'
S3	11	AU='OLES F' OR AU='OLES F J'
S4	774	AU='ZHANG T':AU='ZHANG T Z Y' OR AU='ZHANG TONG':AU='ZHANG
	TONG TONY'	
s5	850	S1 OR S2 OR S3 OR S4
s6	88	S5 AND IC=(G06E? OR G06F? OR G06G?)
s7	10	S6 AND IC=(G06E-001? OR G06E-003? OR G06F-015? OR G06G-007-
?)		
S8 .	2	S1 AND S2 AND S3 AND S4
S9	11	S7 OR S8
File 347: JAPIO Nov 1976-2004/Jun (Updated 041004)		
	(c) 20	004 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2004/Oct W04		
	(c) 20	004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20041028,UT=20041021		
	(c) 20	004 WIPO/Univentio
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200470		
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9/5/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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Image available 07339214

METHOD FOR BIO-METRIC-BASED AUTHENTICATION IN RADIO COMMUNICATION FOR ACCESS CONTROL

PUB. NO.:

2002-207705 [JP 2002207705 A]

PUBLISHED:

July 26, 2002 (20020726)

INVENTOR(s):

BOLLE RUDOLF MARTEN

SHARON LOUISE NANZU

PANKANTI SHARATHCHANDRA

RATHA NALINI KANTA

SMITH BARTON ALLEN THOMAS GUTHRIE JUUMAN

APPLICANT(s): INTERNATL BUSINESS MACH CORP (IBM)

APPL. NO.:

2001-313969 [JP 2001313969]

FILED:

October 11, 2001 (20011011)

PRIORITY:

00 689598 [US 2000689598], US (United States of America),

October 13, 2000 (20001013)

INTL CLASS:

G06F-015/00 ; H04L-009/32

ABSTRACT

PROBLEM TO BE SOLVED: To provide a system and a method for authenticating a user by a radio communication, using an acquired bio-metric (for example fingerprint) and a bio-metric template stored locally.

SOLUTION: A smart card system used for bio-metric authentication is slow in a processing speed, and the card itself has additionally demerits of erroneous storage or loss. A problem of security of the possibility exposed to risk is exhibited in storage (in a database) of a bio-metric data via a network. High security is attained when the bio-metric template is stored locally in a portable device. The user uses the portable device to radio-transmit the bio-metric stored for the authentication, or measures locally the bio-metric using the portable device to collated with bio-metric stored locally (in the portable device).

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(Item 1 from file: 350) 9/5/2

DIALOG(R) File 350: Derwent WPIX

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016496837

Image available

WPI Acc No: 2004-654783/200464

XRPX Acc No: N04-518105

Host-side wireless interface for wireless keyboard, has host interface that operates in input/output system interface mode if serviced host initiates bootstrap operation, to allow user input to the system during bootstrap operation

Patent Assignee: BROADCOM CORP (BROA-N); WONG Y C (WONG-I); ZHANG T (ZHAN-I)

Inventor: POLO A; ZHANG T; WONG Y C

Number of Countries: 033 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date Week A2 20040908 EP 1455272 EP 20045276 Α 20040305 200464 20030305 200464 US 20040177132 A1 20040909 US 2003452251 P

> US 2003454294 Ρ 20030313 US 2003609060 Α 20030628

Priority Applications (No Type Date): US 2003675803 A 20030930; US 2003452251 P 20030305; US 2003454294 P 20030313; US 2003609060 A 20030628 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes EP 1455272 A2 E 32 G06F-009/445

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

US 20040177132 A1 G06F-015/177 Provisional application US 2003452251

Provisional application US 2003454294

Abstract (Basic): EP 1455272 A2

NOVELTY - A host interface connected to wireless interface and serviced host, operates in a basic input/output system (BIOS) host interface mode when the serviced host initiates bootstrap operation through BIOS, to allow input from user input device to BIOS through wireless interface, during bootstrap operation.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) computer peripheral adapter; and

(2) method for operating host-side wireless interface .

USE - Host-side wireless interface for personal computer (PC), wireless keyboard, wireless mouse, wirelessly enabled printer, wirelessly enabled camera and wirelessly enabled game controller.

ADVANTAGE - Enables the user to interface with BIOS during booting operations before loading and configuration of operating system.

DESCRIPTION OF DRAWING(S) - The figure shows the basic input/output system.

pp; 32 DwgNo 1/15

Title Terms: HOST; SIDE; WIRELESS; INTERFACE; WIRELESS; KEYBOARD; HOST; INTERFACE; OPERATE; INPUT; OUTPUT; SYSTEM; INTERFACE; MODE; SERVICE; HOST; INITIATE; BOOTSTRAP; OPERATE; ALLOW; USER; INPUT; SYSTEM; BOOTSTRAP; OPERATE

Derwent Class: T01; T04; W01; W04

International Patent Class (Main): G06F-009/445; G06F-015/177

File Segment: EPI

9/5/3 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX

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015644918 **Image available**
WPI Acc No: 2003-707101/200367

XRPX Acc No: N03-564821

Text categorization method involves regularizing convex optimization problem derived from modified training error function by finding weight vector, after which problem is solved by relaxation

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: OLES F J ; ZHANG T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 6571225 B1 20030527 US 2000502578 A 20000211 200367 B

Priority Applications (No Type Date): US 2000502578 A 20000211 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes US 6571225 B1 20 G06F-015/18

Abstract (Basic): US 6571225 B1

NOVELTY - A convex optimization problem is derived from modified training error function by finding a weight vector w, to minimize modified training error function. The convex optimization problem is regularized by adding a convex term dependent on weight vector. The problem is solved by relaxation which involves optimizing components of weight vector, one at a time.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) document prediction method;
- (2) text categorizing system; and

(3) document prediction system. USE - For categorizing messages or documents containing text. ADVANTAGE - Provides new formulation for training linear classifier as well as numerical algorithm to solve the formulation, which is more amenable to traditional unconstrained numerical methods. DESCRIPTION OF DRAWING(S) - The figure shows the flow diagram explaining the steps involved in text categorization method. pp; 20 DwgNo 1/8 Title Terms: TEXT; METHOD; REGULAR; CONVEX; OPTIMUM; PROBLEM; DERIVATIVE; MODIFIED; TRAINING; ERROR; FUNCTION; FINDER; WEIGHT; VECTOR; AFTER; PROBLEM; SOLVING; RELAX Derwent Class: T01 International Patent Class (Main): G06F-015/18 File Segment: EPI (Item 3 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 015494861 **Image available** WPI Acc No: 2003-557008/200352 2 - 2 - 2 - 2 - 2 - 2 - 2 XRPX Acc No: N03-442642 Network interface for portable computer, has replicator which receives analog signals from network and delivers corresponding digital network signal to portable computer through external connector Patent Assignee: FORLENZA D (FORL-I); NGUYEN M (NGUY-I); ZHANG T (ZHAN-I) Inventor: FORLENZA D; NGUYEN M; ZHANG T Number of Countries: 001 Number of Patents: 001 Patent Family: Patent No Kind Date Applicat No Kind Date Week US 20030084192 A1 20030501 US 99395781 Α 19990914 200352 B Priority Applications (No Type Date): US 99395781 A 19990914 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes US 20030084192 A1 9 G06F-015/16 Abstract (Basic): US 20030084192 A1 NOVELTY - A replicator (12) receives analog signals from a network using an analog network circuit and delivers corresponding digital network signals to an external connector (64) of a portable computer (10) which has a digital network interface controller (62) to receive the digital network signals. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) portable computer; and (2) method for interfacing portable computer with network. USE - For interfacing especially a portable computer (claimed) with networks having token ring connections, modem connections. ADVANTAGE - Ensures high speed network communication without replicator to deliver digital signals corresponding to the analog DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of

an Ethernet network. Also, for interfacing the portable computer with

extending the PCI bus external to the computer, by providing the network signals.

the control circuits contained within the portable computer and the replicator.

portable computer (10) replicator (12) digital network interface controller (62) external connector (64) pp; 9 DwgNo 2/4

Title Terms: NETWORK; INTERFACE; PORTABLE; COMPUTER; REPLICA; RECEIVE; ANALOGUE; SIGNAL; NETWORK; DELIVER; CORRESPOND; DIGITAL; NETWORK; SIGNAL; PORTABLE; COMPUTER; THROUGH; EXTERNAL; CONNECT

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/16
File Segment: EPI

9/5/5 (Item 4 from file: 350)
DIALOG(R) File 350: Derwent WPIX

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015470052 **Image available**
WPI Acc No: 2003-532198/200350

XRPX Acc No: N03-422328

Internet protocol address dynamic allocation method involves distinguishing time sensitive and time in-sensitive Internet protocol address demands, and updating groups of address spaces using Internet protocol server

Patent Assignee: AGRAWAL P (AGRA-I); FAMOLARI D (FAMO-I); ZHANG T (ZHAN-I)

Inventor: AGRAWAL P; FAMOLARI D; ZHANG T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20030079017 A1 20030424 US 200145267 A 20011023 200350 B

Priority Applications (No Type Date): US 200145267 A 20011023 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes US 20030079017 A1 11 G06F-015/173

Abstract (Basic): US 20030079017 A1

NOVELTY - A total Internet protocol (IP) address pool determined for a wireless cell, is partitioned into groups of address spaces for use with an associated user group within the wireless cell. Time sensitive and time in-sensitive IP address demands are distinguished, by monitoring IP address demands associated with the wireless cell. The groups of address spaces are updated using an IP server.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an Internet protocol address dynamic allocation system.

USE - For dynamically allocating Internet protocol address for wireless cells.

ADVANTAGE - Enables time sensitive handoff hosts to obtain a new IP address in a timely manner. Reduces the probability of degraded network performance due to delays in the assignment of IP address to wireless hosts.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of shared IP servers without base station requests.

pp; 11 DwgNo 2/3

Title Terms: PROTOCOL; ADDRESS; DYNAMIC; ALLOCATE; METHOD; DISTINGUISH; TIME; SENSITIVE; TIME; SENSITIVE; PROTOCOL; ADDRESS; DEMAND; UPDATE; GROUP; ADDRESS; SPACE; PROTOCOL; SERVE

Derwent Class: T01; W01; W02

International Patent Class (Main): G06F-015/173

File Segment: EPI

9/5/6 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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015377176 **Image available**
WPI Acc No: 2003-438114/200341

XRPX Acc No: N03-349447

Decision-tree based symbolic rule induction method for text categorization, involves adding computed confidence level to corresponding rule for generating final Rule set

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: JOHNSON D E; OLES F J; ZHANG T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 6519580 B1 20030211 US 2000589397 A 20000608 200341 B

Priority Applications (No Type Date): US 2000589397 A 20000608

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6519580 B1 21 G06F-017/00

Abstract (Basic): US 6519580 B1

NOVELTY - A set TR, representing the set of training documents is created, such that the set suits rule induction. A Rule set is generated by combining the various R(C) generated for each category, and the confidence level is computed. The computed confidence level is added to the corresponding rule and the final Rule set comprising rules and corresponding confidence level is generated.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) text categorization method; and
- (2) decision-tree based symbolic rule induction system.

USE - For categorizing messages, documents containing text such as e-mails, news, patents, case summaries etc.

ADVANTAGE - Automatically categorizes messages or documents and provides a high performance system. Also provides a system with excellent recall, high precision and high training speed, insight and poor error rate.

DESCRIPTION OF DRAWING(S) - The figure shows flow chart illustrating the steps for inducing decision-tree based set of symbolic rules.

pp; 21 DwgNo 1/8

Title Terms: DECIDE; TREE; BASED; SYMBOL; RULE; INDUCTION; METHOD; TEXT; ADD; COMPUTATION; CONFIDE; LEVEL; CORRESPOND; RULE; GENERATE; FINAL; RULE; SET

Derwent Class: T01.

International Patent Class (Main): G06F-017/00

International Patent Class (Additional): G06F-015/18

File Segment: EPI

9/5/7 (Item 6 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015356725 **Image available**
WPI Acc No: 2003-417663/200339

XRPX Acc No: N03-333065

Computer system for video event detection, combines visual and textual feature vectors of disparate visual and textual modalities into unified feature vector

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: BOLLE R M ; HAAS N ; OLES F J ; ZHANG T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 20030033347 A1 20030213 US 2001853191 A 20010510 200339 B

Priority Applications (No Type Date): US 2001853191 A 20010510

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes US 20030033347 A1 49 G06E-001/00

Abstract (Basic): US 20030033347 Al

NOVELTY - The computer system creates visual and textual feature vectors for disparate visual and textual modalities. The visual and textual feature vectors are concatenated into a unified feature vector.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the

(1) multimedia stream segmenting method;

- (2) computer memory storing multimedia stream segmenting program; and
 - (3) multimedia stream segmenting system.

USE - For video event detection and for locating illegal copies of multimedia information including TV commercials, video clips, news, documentary, movie releases, weather, politics, sports such as basketball, soccer, golf, etc., on Internet or public databases, management of large video data bass, video stream segmentation, etc.

ADVANTAGE - Provides a unified representation of disparate modalities of the media item being compared, resulting in well-established learning techniques.

DESCRIPTION OF DRAWING(S) - The figure shows a flow chart explaining the combined computation of the disparate sources of information from a media item.

pp; 49 DwgNo 3/22

Title Terms: COMPUTER; SYSTEM; VIDEO; EVENT; DETECT; COMBINATION; VISUAL; TEXT; FEATURE; VECTOR; DISPARITY; VISUAL; TEXT; UNIFIED; FEATURE; VECTOR Derwent Class: T01

International Patent Class (Main): G06E-001/00

International Patent Class (Additional): G06E-003/00; G06F-009/00;

G06F-015/16; G06F-015/18; G06G-007/00

File Segment: EPI

9/5/8 (Item 7 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv.

015319079 **Image available**
WPI Acc No: 2003-380014/200336

XRPX Acc No: N03-303459

Multimedia information handling method for providing legal services, involves concatenating and categorizing visual and textual feature vectors of respective modalities, based on which user profile is assembled

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC) Inventor: BOLLE R M; HAAS N; OLES F J; ZHANG T Number of Countries: 001 Number of Patents: 001 Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 20030004966 A1 20030102 US 2001883415 A 20010618 200336 B

Priority Applications (No Type Date): US 2001883415 A 20010618 Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes

US 20030004966 A1 56 G06F-007/00

Abstract (Basic): US 20030004966 A1

NOVELTY - The multimedia items (1601) having disparate modalities such as visual and textual modalities accessed by a user, are monitored. The visual and textual feature vectors for the modalities are created, concatenated and categorized based on which a user profile is assembled.

USE - For handling multimedia information for providing user profile based services such as legal, real estate, medical, technical, physical training, diet, cosmetic, fashion, governmental, vehicle, design, architecture, personal assistants, games, dating services, landscaping services, etc., through network such as Internet, intranet, extranet, corporate network, government network, infrared network and radio frequency network.

ADVANTAGE - Categorizes the multimedia items reliably for creating a user profile, while handling both textual and visual features coherently.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the categorization system illustrating how different formats of media items are handled in the categorization process.

multimedia items (1601)

pp; 56 DwgNo 16/27

'Title Terms: INFORMATION; HANDLE; METHOD; LEGAL; SERVICE; VISUAL; TEXT;

FEATURE; VECTOR; RESPECTIVE; BASED; USER; PROFILE; ASSEMBLE

Derwent Class: T01

International Patent Class (Main): G06F-007/00

File Segment: EPI

9/5/9 (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015251352 **Image available**

WPI Acc No: 2003-312278/200330

XRPX Acc No: N03-248702

Notebook computer system has seek logic which activates power supply and asserts seek command to wireless communication module, when button provided on exterior surface of notebook computer is activated

Patent Assignee: JEANSONNE J K (JEAN-I); MONDSHINE J L (MOND-I); PARKER J C

(PARK-I); ZHANG T L (ZHAN-I)

Inventor: JEANSONNE J K; MONDSHINE J L; PARKER J C; ZHANG T L

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week US 20030023761 A1 20030130 US 2001912784 A 20010725 200330 B

Priority Applications (No Type Date): US 2001912784 A 20010725

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20030023761 A1 12 G06F-015/16

Abstract (Basic): US 20030023761 Al

NOVELTY - A seek logic (60) activates a power supply (40) by assertion of a power supply enable signal, and asserts seek command output signal to wireless communication unit (42), when a button (58) mounted on exterior surface of the notebook computer (100) is activated. The wireless unit scans radio channels for availability of wireless access points, in response to the output signal and indicates the availability of access points.

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DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) wireless LAN access point scanning method; and
- (2) wireless access point finding method.

USE - Notebook computer system with wireless access capability. ADVANTAGE - Enables checking and indicating the availability of wireless access points effectively, by activating the button provided on the exterior surface of the notebook computer, without powering ON or booting and starting software on the notebook computer.

DESCRIPTION OF DRAWING(S) - The figure shows the electrical block diagram of wireless communication unit connected to notebook computer.

power supply (40)

wireless communication unit (42)

button (58)

seek logic (60)

notebook computer (100)

pp; 12 DwgNo 2/3

Title Terms: COMPUTER; SYSTEM; SEEKER; LOGIC; ACTIVATE; POWER; SUPPLY; SEEKER; COMMAND; WIRELESS; COMMUNICATE; MODULE; BUTTON; EXTERIOR; SURFACE ; COMPUTER; ACTIVATE

Derwent Class: T01; U12; W01

International Patent Class (Main): G06F-015/16

File Segment: EPI

(Item 9 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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014190257
             **Image available**
WPI Acc No: 2002-010954/200201
XRPX Acc No: N02-009098
  A system for cable network which is defined by a software
Patent Assignee: CATHAY ROXUS INFORMATION TECHNOLOGY CO L (CATH-N); HUANUO
  INFORMATINO TECHNOLOGY CO LTD BEI (HUAN-N)
Inventor: DU J; ZHAN J; ZHANG T
Number of Countries: 095 Number of Patents: 005
Patent Family:
Patent No Kind Date
                            Applicat No
                                           Kind Date
                                                           Week 🕠 .
             A1 20011018 WO 2000CN524
                                                 20001128
                                                          200201 B
WO 200177813
                                            Α
             Α
                                                20001128
AU 200116905
                   20011023 AU 200116905
                                                          200213
                                            Α
CN 1317749
                   20011017 CN 2000105788
                                               20000407
              Α
                                            Α
                                                          200213
EP 1241566
              Al 20020918 EP 2000979366
                                            Α
                                                20001128
                                                          200269
                             WO 2000CN524
                                                 20001128
                                            Α
JP 2003530637 W
                   20031014
                             WO 2000CN524
                                             Α
                                                 20001128
                                                          200368
                             JP 2001574600
                                            А
                                                 20001128
Priority Applications (No Type Date): CN 2000105788 A 20000407
Patent Details:
Patent No Kind Lan Pg
                        Main IPC
                                     Filing Notes
WO 200177813 A1 C 28 G06F-009/00
   Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
   CH CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE
   KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO
   RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200116905 A
                      G06F-009/00
                                     Based on patent WO 200177813
CN 1317749 A. ..
                    G06F-015/163 . ...
                                                4-4-1-6
EP 1241566
             A1 E
                      G06F-009/00
                                     Based on patent WO 200177813
   Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
   LI LT LU LV MC MK NL PT RO SE SI TR
JP 2003530637 W
                    31 G06F-011/00
                                     Based on patent WO 200177813
Abstract (Basic): WO 200177813 Al
        NOVELTY - The system and method of the cable network defined by
    software. A programmable chip is adopted in users' termination devices,
    the chip can perform a new protocol by downloading a program from said
    server front end device, or by reading a program in the memory medium
    into said users' termination devices, to realize the re-programming of
    the chip and thereby to change the functions of the cable network
    system. When the server front end device is upgraded, by re-programming
    said chip, the protocol that is performed by the chip is consistent
    with the protocol in the server front end device without updating the
    users' termination devices, and thus the cable network system is
    upgraded.
        USE - A system for cable network which is defined by a software
        pp; 28 DwgNo 1/6
Title Terms: SYSTEM; CABLE; NETWORK; DEFINE; SOFTWARE
Derwent Class: T01; W01
International Patent Class (Main): G06F-009/00; G06F-011/00;
  G06F-015/163
International Patent Class (Additional): G06F-009/445; H04L-012/28
File Segment: EPI
            (Item 10 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
012192810
             **Image available**
WPI Acc No: 1998-609723/199851
```

Data clustering method in large database system - involves forming clustering feature tree comprising leaf nodes including leaf entries

XRPX Acc No: N98-474312

consisting of clustering features

Patent Assignee: WISCONSIN ALUMNI RES FOUND (WISC)

Inventor: LIVNY M; RAMAKRISHNAN R; ZHANG T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 5832182 A 19981103 US 96690876 A 19960424 199851 B

Priority Applications (No Type Date): US 96690876 A 19960424

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 5832182 A 42 G06F-015/18

Abstract (Basic): US 5832182 A

The method involves receiving data points from data source. Clusters of data points within the selected threshold are determined. A clustering feature comprising the number, the linear sum and square sum of the data points in the cluster are determined and stored in a main memory. A clustering feature tree comprising leaf nodes including leaf entries is formed. One level of nodes are joined to the leaf nodes, the leaf entries of the tree comprising the clustering features of the clusters, the next highest nodes in the tree above the leaves comprising non-leaf nodes to a selected number of different leaves comprising a branch number.

Each non-leaf nodes is distinguished by identifiers stored in the main memory comprising the clustering features of each leaf to which the non-leaf node is joined and pointers indicating the leaves to which the node is joined. Higher level nodes distinguished by identifiers and joined to the branch number of lower level nodes comprise the clustering features for each lower node to which the higher node is joined and pointers indicating the lower nodes to which the higher node is joined. The tree terminates at the root node.

USE - In computer processor.

ADVANTAGE - Allows user to line performance according to the knowledge of data set by controlling several parameters. Enables to determine useful patterns.

Dwg.1/25

Title Terms: DATA; METHOD; DATABASE; SYSTEM; FORMING; FEATURE; TREE; COMPRISE; LEAF; NODE; LEAF; ENTER; CONSIST; FEATURE

Derwent Class: T01

International Patent Class (Main): G06F-015/18

File Segment: EPI

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Set
       Items
               Description
                AU=(BOLLE, R? OR BOLLE R? OR HAAS, N? OR HAAS N? OR OLES, -
S1
        12070
             F? OR OLES F? OR ZHANG, T? OR ZHANG T?)
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                S1 AND (MULTIMEDIA OR MULTI()MEDIA)
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File
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       6:NTIS 1964-2004/Oct W4
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       8:Ei Compendex(R) 1970-2004/Oct W4
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     34:SciSearch(R) Cited Ref Sci 1990-2004/Oct W4
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     92:IHS Intl.Stds.& Specs. 1999/Nov
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     94:JICST-EPlus 1985-2004/Oct W1
         (c) 2004 Japan Science and Tech Corp(JST)
     95:TEME-Technology & Management 1989-2004/Jun W1
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         (c) 2004 FIZ TECHNIK
     99:Wilson Appl. Sci & Tech Abs 1983-2004/Sep
File
         (c) 2004 The HW Wilson Co.
File 103:Energy SciTec 1974-2004/Oct B1
         (c) 2004 Contains copyrighted material
File 144: Pascal 1973-2004/Oct W4
         (c) 2004 INIST/CNRS
File 202:Info. Sci. & Tech. Abs. 1966-2004/Sep 09
         (c) 2004 EBSCO Publishing
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         (c) 2003 EBSCO Pub.
File 239:Mathsci 1940-2004/Dec
         (c) 2004 American Mathematical Society
File 275: Gale Group Computer DB(TM) 1983-2004/Nov 01
         (c) 2004 The Gale Group
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
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         (c) 2004 CMP Media, LLC
File 674: Computer News Fulltext 1989-2004/Sep W1
         (c) 2004 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2004/Nov 01
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4/5/1
          (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
          E.I. No: EIP04218169930
  Title: Proceedings of SPIE - Internet Multimedia Management Systems IV
  Author: Smith, J.R. (Ed.); Panchanathan, S. (Ed.); Zhang, T. (Ed.)
  Conference Title: Internet Multimedia Management Systems IV
              Location: Orlando, FL, United States
                                                       Conference Date:
20030909-20030911
  Sponsor: SPIE
  E.I. Conference No.: 62867
  Source: Proceedings of SPIE - The International Society for Optical
Engineering Internet Multimedia Management Systems IV v 5242 2003.
  Publication Year: 2003
  CODEN: PSISDG
                ISSN: 0277-786X
  Language: English
  Document Type: CP; (Conference Review) Treatment: T; (Theoretical)
  Journal Announcement: 0405W4
  Abstract: The proceedings contains 32 papers from the conference of SPIE-
Internet Multimedia Management Systems IV. The topics discussed include:
hierarchical video summarization based on context clustering; audio
fingerprint extraction for content identification; semi-automatic approach
for music classification; coding format independent multimedia content
adaptation using XML and generating panorama photos. (Edited abstract)
  Descriptors: Video recording; Image analysis; Abstracting; Content based
retrieval; Context free grammars; Multimedia systems; Metadata; Problem
solving; Feature extraction; Classification (of information);
Hierarchical systems; Information analysis; Database systems
  Identifiers: Movie skimming; Tempo analysis; Cinema rule; Story unit;
Video summarization; Video content analysis; Adaptive playback; Visual
complexity; Video context clustering; EiRev
  Classification Codes:
  716.4 (Television Systems & Equipment); 723.2 (Data Processing); 903.1
(Information Sources & Analysis); 721.1 (Computer Theory (Includes Formal
Logic, Automata Theory, Switching Theory & Programming Theory)); 723.5
(Computer Applications); 723.4 (Artificial Intelligence); 741.1 (Light &
Optics); 716.1 (Information & Communication Theory); 731.1 (Control
Systems); 723.3 (Database Systems); 752.2 (Sound Recording)
      (Electronic Equipment, Radar, Radio & Television); 723
Software, Data Handling & Applications); 741 (Light, Optics & Optical
Devices); 903 (Information Science); 721 (Computer Circuits & Logic
Elements); 731 (Automatic Control Principles & Applications); 752 (Sound
Devices, Equipment & Systems)
  71 (ELECTRONICS & COMMUNICATION ENGINEERING); 72 (COMPUTERS & DATA
PROCESSING); 74 (LIGHT & OPTICAL TECHNOLOGY); 90 (ENGINEERING, GENERAL);
73 (CONTROL ENGINEERING); 75 (SOUND & ACOUSTICAL TECHNOLOGY)
 4/5/2
           (Item 2 from file: 8)
DIALOG(R) File 8:Ei Compendex(R)
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06855187
          E.I. No: EIP04218169906
  Title: Semi-Automatic Approach for Music Classification
  Author: Zhang, Tong
  Corporate Source: Hewlett-Packard Laboratories, Palo Alto, CA 94304,
United States
  Conference Title: Internet Multimedia Management Systems IV
  Conference Location: Orlando, FL, United States Conference Date:
20030909-20030911
  Sponsor: SPIE
  E.I. Conference No.: 62867
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Source: Proceedings of SPIE - The International Society for Optical

Engineering Internet Multimedia Management Systems IV v 5242 2003.

Publication Year: 2003

CODEN: PSISDG ISSN: 0277-786X

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Journal Announcement: 0405W4

Abstract: Audio categorization is essential when managing a music database, either a professional library or a personal collection. However, a complete automation in categorizing music into proper classes for browsing and searching is not yet supported by today 's technology. Also, the issue of music classification is subjective to some extent as each user may have his own criteria for categorizing music. In this paper, we propose the idea of semi-automatic music classification . With this approach, a music browsing system is set up which contains a set of tools for separating music into a number of broad types (e.g. male solo, female solo, string instruments performance, etc.) using existing music analysis methods. With results of the automatic process, the user may further cluster music pieces in the database into finer classes and/or adjust misclassifications manually according to his own preferences and definitions. Such a system may greatly improve the efficiency of music browsing and retrieval, while at the same time guarantee accuracy and user's satisfaction of the results. Since this semi-automatic system has two parts, i.e. the automatic part and the manual part, they are described separately in the paper, with detailed descriptions and examples of each step of the two parts included. 8 Refs.

Descriptors: Multimedia systems; Database systems; Compact disks; Web browsers; Musical instruments; Data reduction; Computer software; Speech Identifiers: Music classification; Music database management; Audio content analysis; Semi-automatic classification; Audio features; Audio spectrum analysis; Music instrument classification; Singing detection Classification Codes:

723.5 (Computer Applications); 723.3 (Database Systems); 722.1 (Data Storage, Equipment & Techniques); 752.4 (Acoustic Generators); 723.2 (Data Processing); 751.5 (Speech)

723 (Computer Software, Data Handling & Applications); 722 (Computer Hardware); 752 (Sound Devices, Equipment & Systems); 751 (Acoustics, Noise & Sound)

72 (COMPUTERS & DATA PROCESSING); 75 (SOUND & ACOUSTICAL TECHNOLOGY)

4/5/3 (Item 3 from file: 8) DIALOG(R) File 8:Ei Compendex(R)

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06139595 E.I. No: EIP02397100099

Title: Content-based classification and retrieval of audio

Author: Zhang, Tong; Jay Kuo, C.-C. Corporate Source: Integrated Media Systems Center Dept. of Elec. Engineering-Systems University of Southern California, Los Angeles, CA 90089-2564, United States Conference Title: Advance Signal Processing Algorithms, Atchitectures,

and Implementations VIII

Conference Location: San diego, CA, United States Conference Date: 19980722-19980724

Sponsor: SPIE

E.I. Conference No.: 59634

Source: Proceedings of SPIE - The International Society for Optical Engineering v 3461 1998. p 432-443

Publication Year: 1998

CODEN: PSISDG ISSN: 0277-786X

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical); X; (Experimental)

Journal Announcement: 0209W5

Abstract: An online audio classification and segmentation system is presented in this research, where audio recordings are classified and segmented into speech, music, several types of environmental sounds and silence based on audio content analysis. This is the first step of our continuing work towards a general content-based audio classification and retrieval system. The extracted audio features include temporal curves of

the energy function, the average zero-crossing rate, the fundamental frequency of audio signals, as well as statistical and morphological features of these curves. The classification result is achieved through a threshold-based heuristic procedure. The audio database that we have built, details of feature extraction, classification and segmentation procedures, and experimental results are described. It is shown that, with the proposed new system, audio recordings can be automatically segmented and classified into basic types in real time with an accuracy of over 90%. Outlines of further classification of audio into finer types and a query-by-example audio retrieval system on top of the coarse classification are also introduced. 11 Refs.

Descriptors: Acoustic signal processing; Image retrieval; Multimedia systems; Stereophonic recordings; Heuristic methods

Identifiers: Audio segmentations

Classification Codes:

723.5 (Computer Applications); 752.2 (Sound Recording)

751 (Acoustics, Noise & Sound); 723 (Computer Software, Data Handling & Applications); 752 (Sound Devices, Equipment & Systems); 921 (Applied Mathematics)

75 (SOUND & ACOUSTICAL TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

4/5/4 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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05828481 E.I. No: EIP01236530674

Title: Audio content analysis for online audiovisual data segmentation and classification

Author: Zhang, T.; Kuo, C.-C.J.

Corporate Source: Integrated Media Systems Center Dept. of Elec. Engineering-Systems University of Southern California, Los Angeles, CA 90089-2564, United States

Source: IEEE Transactions on Speech and Audio Processing v 9 n 4 May 2001 2001. p 441-457

Publication Year: 2001

CODEN: IESPEJ ISSN: 1063-6676

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 0106W2

Abstract: While current approaches for audiovisual data segmentation and classification are mostly focused on visual cues, audio signals may actually play a more important role in content parsing for many applications. An approach to automatic segmentation and classification of audiovisual data based on audio content analysis is proposed. The audio signal from movies or TV programs is segmented and classified into basic types such as speech, music, song, environmental sound, speech with music background, environmental sound with music background, silence, etc. Simple audio features including the energy function, the average zero-crossing rate, the fundamental frequency, and the spectral peak tracks are extracted to ensure the feasibility of real-time processing. A heuristic rule-based procedure is proposed to segment and classify audio signals and built upon morphological and statistical analysis of the time-varying functions of these audio features. Experimental results show that the proposed scheme achieves an accuracy rate of more than 90% in audio classification . 30 Refs.

Descriptors: Image segmentation; Audio acoustics; Multimedia systems; Database systems; Heuristic methods

Identifiers: Audio content analysis; Audiovisual segmentation Classification Codes:

723.2 (Data Processing); 741.1 (Light & Optics); 751.1 (Acoustic Waves); 723.5 (Computer Applications); 723.3 (Database Systems)

723 (Computer Software, Data Handling & Applications); 741 (Light, Optics & Optical Devices); 751 (Acoustics, Noise & Sound); 921 (Applied Mathematics)

72 (COMPUTERS & DATA PROCESSING); 74 (LIGHT & OPTICAL TECHNOLOGY); 75

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(Item 5 from file: 8)
DIALOG(R) File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
05811795
          E.I. No: EIP01204959144
  Title: Heuristic approach for generic audio data segmentation and
annotation
 Author: Zhang, Tong; Kuo, C.-C. Jay
 Corporate Source: Univ of Southern California, Los Angeles, CA, United
 Conference Title: Proceedings of the 1999 7th International Multimedia
Conference - ACM MULTIMEDIA '99
 Conference
                Location:
                           Orlando, FL,
                                               USA Conference
19991030-19991105
 Sponsor: ACM
 E.I. Conference No.: 56197
 Source: Proceedings of the ACM International Multimedia Conference &
Exhibition 1999. ACM, New York, NY, United States
 Publication Year: 1999
                                          a area a mark
 CODEN: 002179
 Language: English
 Document Type: CA; (Conference Article) Treatment: A; (Applications); G
; (General Review); T; (Theoretical)
 Journal Announcement: 0105W2
 Abstract: A real-time audio segmentation and indexing scheme is presented
in this paper. Audio recordings are segmented and classified into basic
audio types such as silence, speech, music, song, environmental sound,
speech with the music background, environmental sound with the music
background, etc. Simple audio features such as the energy function, the
average zero-crossing rate, the fundamental frequency, and the spectral
peak track are adopted in this system to ensure on-line processing.
Morphological and statistical analysis for temporal curves of these
features are performed to show differences among different types of audio.
A heuristic rule-based procedure is then developed to segment and
classify audio signals by using these features. The proposed approach is
generic and model free. It can be applied to almost any content-based audio
management system. It is shown that the proposed scheme achieves an
accuracy rate of more than 90% for audio classification . Examples for
segmentation and indexing of accompanying audio signals in movies and
video programs are also provided. (Author abstract) 11 Refs.
 Descriptors: Multimedia systems; Image segmentation; Automatic indexing
; Data structures; Heuristic methods; Statistical methods; Mathematical
morphology; Curve fitting; Mathematical models; Database systems
 Identifiers: Audio content analysis; Audio database management; Audio
segmentations
 Classification Codes:
 723.5 (Computer Applications); 723.2 (Data Processing); 903.1
(Information Sources & Analysis); 922.2 (Mathematical Statistics); 921.6
(Numerical Methods)
 723 (Computer Software, Data Handling & Applications); 903 (Information
Science); 921 (Applied Mathematics); 922 (Statistical Methods)
 72 (COMPUTERS & DATA PROCESSING); 90 (ENGINEERING, GENERAL); 92
(ENGINEERING MATHEMATICS)
          (Item 1 from file: 34)
DIALOG(R) File 34:SciSearch(R) Cited Ref Sci
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Genuine Article#: 422VV Number of References: 30
09577014
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Title: Audio content analysis for online audiovisual data segmentation and classification

Author(s): Zhang T (REPRINT) ; Kuo CCJ Corporate Source: Univ So Calif, Integrated Media Syst Ctr, Los

Angeles//CA/90089 (REPRINT); Univ So Calif, Integrated Media Syst Ctr, Los Angeles//CA/90089 Journal: IEEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING, 2001, V9, N4 (MAY), P441-457 ISSN: 1063-6676 Publication date: 20010500 Publisher: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC, 345 E 47TH ST, NEW YORK, NY 10017-2394 USA Language: English Document Type: ARTICLE Geographic Location: USA Journal Subject Category: ACOUSTICS; ENGINEERING, ELECTRICAL & ELECTRONIC Abstract: While current approaches for audiovisual data segmentation and classification are mostly focused on visual cues, audio signals may actually play a more important role in content parsing for many applications, An approach to automatic segmentation and classification of audiovisual data based on audio content analysis is proposed, The audio signal from movies or TV programs is segmented and classified into basic types such as speech, music, song, environmental sound, speech with music background, environmental sound with music background, silence, etc. Simple audio features Including the energy function, the average zero-crossing rate, the fundamental frequency, and the spectral peak tracks are extracted to ensure the feasibility of real-time processing. A heuristic rule-based procedure is proposed to segment and ${\it classify}$ audio signals and built upon morphological and statistical analysis of the time-varying functions of these audio features. Experimental results show that the proposed scheme achieves an accuracy rate of more than 90% in audio classification . Descriptors -- Author Keywords: audio analysis; audio indexing; audio segmentation; audiovisual content parsing; information filtering and retrieval; multimedia database management Identifiers--KeyWord Plus(R): VIDEO Cited References: BORECZKY JS, 1998, P3741, P ICASSP 98 SEATTL M BREGMAN AS, 1990, AUDITORY SCENE ANAL BROWN GJ, 1994, V8, P297, COMPUT SPEECH LANG CHANG SF, 1998, V8, P602, IEEE T CIRC SYST VID CHOI A, 1997, V5, P201, IEEE T SPEECH AUDI P DOVAL B, 1991, V5, P3657, P INT C AC SPEECH SI ELLIS DPW, 1996, THESIS MIT CAMBRIDGE EVEREST F, 1994, MASTER HDB ACOUSTICS FLICKNER M, 1995, V9, P23, IEEE COMPUT FOOTE J, 1997, P SPIE GHIAS A, 1995, P231, P 3 ACM INT C MULT HUANG J, 1998, P IEEE C IM PROC OCT KIMBER D, 1996, P INT C SYDN AUSTR J KUHN WB, 1990, V14, P60, COMPUT MUSIC J LIU Z, 1998, P27, P IEEE 2 WORKSH MULT LIU Z, 1997, P IEEE 1 MULT WORKSH LIU Z, 1998, P364, P IEEE 2 WORKSH MULT MINAMI K, 1998, P17, IEEE MULTIMEDIA JUL NAPHADE MR, 1998, P IEEE C IM PROC CHI PATEL NV, 1996, V2670, P373, P SOC PHOTO-OPT INS PFEIFFER S, 1996, AUTOMATIC AUDIO CONT RABINER L, 1978, DIGITAL PROCESSING S SAUNDERS J, 1996, V2, P993, P ICASSP 96 SCHEIRER E, 1997, P INT C AC SPEECH SI SMITH G, 1998, P3777, P INT C AC SPEECH SI SMOLIAR SW, 1994, V1, P62, IEEE MULTIMEDIA VERCOE BL, 1998, V86, P922, P IEEE WEINTRAUB M, 1985, THESIS STANFORD U ST WOLD E, 1996, P27, IEEE MULTIMEDIA FAL WYSE L, 1995, CONTENT BASED AUDIO

4/5/7 (Item 1 from file: 65)

DIALOG(R) File 65: Inside Conferences
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04861175 INSIDE CONFERENCE ITEM ID: CN050698713
Semi-automatic approach for music classification (5242-09)
 CONFERENCE: Internet multimedia management systems-Conference; 4th
 PROCEEDINGS-SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 2003
  ; VOL 5242 P: 81-91
 SPIE, 2003
  ISSN: 0277-786X ISBN: 0819451258
  LANGUAGE: English DOCUMENT TYPE: Conference Papers
   CONFERENCE EDITOR(S): Smith, John R; Panchanathan, Sethuraman; Zhang,
   CONFERENCE SPONSOR: SPIE
   CONFERENCE LOCATION: Orlando, FL 2003 Sep (2003S) (2003S)
 BRITISH LIBRARY ITEM LOCATION: 6823.100000
 DESCRIPTORS: multimedia management systems; internet; SPIE
 4/5/8
           (Item 2 from file: 65)
DIALOG(R) File 65: Inside Conferences
(c) 2004 BLDSC all rts. reserv. All rts. reserv.
          INSIDE CONFERENCE ITEM ID: CN045016924
Ontology-based image classification using neural networks (4862-21)
 Breen, C.; Khan, L.; Kumar, A.; Wang, L.
  CONFERENCE: Internet multimedia management systems-Conference; 3rd
 PROCEEDINGS-SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 2002
 ; VOL 4862 P: 198-208
 SPIE, 2002
 ISSN: 0277-786X ISBN: 0819446416
 LANGUAGE: English DOCUMENT TYPE: Conference Papers
   CONFERENCE EDITOR(S): Smith, J. R.; Panchanathan, S.; Zhang, T.
   CONFERENCE SPONSOR: SPIE
   CONFERENCE LOCATION: Boston, CO 2002; Jul (200207) (200207)
. BRITISH LIBRARY ITEM LOCATION: 6823.100000
 DESCRIPTORS: multimedia management systems; internet; SPIE
 4/5/9
           (Item 3 from file: 65)
DIALOG(R) File 65:Inside Conferences
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03953343 INSIDE CONFERENCE ITEM ID: CN041515806
Instrument classification in polyphonic music based on timbre analysis
(4519-16)
 CONFERENCE: Internet multimedia management systems-Conference
 PROCEEDINGS-SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 2001
  ; VOL 4519 P: 136-147
 SPIE, 2001
 ISSN: 0277-786X ISBN: 0819442437
 LANGUAGE: English DOCUMENT TYPE: Conference Papers
   CONFERENCE EDITOR(S): Smith, J. R.
   CONFERENCE SPONSOR: SPIE
   CONFERENCE LOCATION: Denver, CO 2001; Aug (200108) (200108)
 BRITISH LIBRARY ITEM LOCATION: 6823.100000
 DESCRIPTORS: multimedia management systems; internet; SPIE
                                               (Item 4 from file: 65)
4/5/10
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02605150 INSIDE CONFERENCE ITEM ID: CN027142909

Hierarchical system for content-based audio classification and retrieval

(3527-36)

Zhang, T.; Kuo, C.-C. J.

CONFERENCE: Multimedia storage and archiving systems III-Conference

PROCEEDINGS-SPIE THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING, 1998

; ISSUE 3527 P: 398-409

SPIE, 1998

ISSN: 0277-786X ISBN: 0819429880

LANGUAGE: English DOCUMENT TYPE: Conference Selected papers

CONFERENCE EDITOR(S): Kuo, C.-C. J.; Chang, S. F.; Panchanathan, S.

CONFERENCE SPONSOR: SPIE

CONFERENCE LOCATION: Boston, MA

CONFERENCE DATE: Nov 1998 (199811) (199811)

BRITISH LIBRARY ITEM LOCATION: 6823.100000

DESCRIPTORS: multimedia storage; SPIE; archiving systems

4/5/11 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
(c) 2004 The HW Wilson Co. All rts. reserv.

2333727 H.W. WILSON RECORD NUMBER: BAST01037893

Audio content analysis for online audiovisual data segmentation and classification

Zhang, Tong; Kuo, C.-C. Jay

IEEE Transactions on Speech and Audio Processing v. 9 no4 (May 2001) p.

441-57

DOCUMENT TYPE: Feature Article ISSN: 1063-6676 LANGUAGE: English

RECORD STATUS: Corrected or revised record

ABSTRACT: The authors present an audio-content-based approach to automatic audiovisual data segmentation and classification. The audio signal from TV programs or movies is segmented and classified into basic types, such as speech and music. An accuracy rate of greater than 90 percent in audio classification is achieved.

DESCRIPTORS: Multimedia information systems; Content based queries; Automatic indexing; Parsing (Computer grammar;

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          108
               S1 AND (MULTIMEDIA OR MULTI()MEDIA)
S3
                S2 AND MODALIT?
S4
                S2 AND CLASSIF?
S5
              AU=(BOLLE, R? OR BOLLE R? OR HAAS, N? OR HAAS N? OR OLES, -
            F? OR OLES F?)
S6
            8 S5 AND (MULTIMEDIA OR MULTI() MEDIA)
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      34:SciSearch(R) Cited Ref Sci 1990-2004/Oct W4
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     35:Dissertation Abs Online 1861-2004/Sep
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File 92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
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         (c)2004 Japan Science and Tech Corp(JST)
File 95:TEME-Technology & Management 1989-2004/Jun W1
         (c) 2004 FIZ TECHNIK
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         (c) 2004 The HW Wilson Co.
File 103:Energy SciTec 1974-2004/Oct B1
         (c) 2004 Contains copyrighted material
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         (c) 2004 INIST/CNRS
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         (c) 2003 EBSCO Pub.
File 239:Mathsci 1940-2004/Dec
         (c) 2004 American Mathematical Society
File 275: Gale Group Computer DB(TM) 1983-2004/Nov 01
         (c) 2004 The Gale Group
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 647:CMP Computer Fulltext 1988-2004/Oct W4
         (c) 2004 CMP Media, LLC
File 674: Computer News Fulltext 1989-2004/Sep W1
         (c) 2004 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2004/Nov 01
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6/5/1 (Item 1 from file: 2)

DIALOG(R) File 2: INSPEC

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6704410 INSPEC Abstract Number: C2000-10-7240-004

Title: Feature based indexing for media tracking

Author(s): Hampapur, A.; Bolle, R.

Author Affiliation: IBM Thomas J. Watson Res. Center, Yorktown Heights, NY, USA

Conference Title: 2000 IEEE International Conference on Multimedia and Expo. ICME2000. Proceedings. Latest Advances in the Fast Changing World of Multimedia (Cat. No.00TH8532) Part vol.3 p.1709-12 vol.3

Publisher: IEEE, Piscataway, NJ, USA

Publication Date: 2000 Country of Publication: USA 3 vol. xxxv+17778 pp.

ISBN: 0 7803 6536 4 Material Identity Number: XX-2000-01992 U.S. Copyright Clearance Center Code: 0 7803 6536 4/2000/\$10.00

Conference Title: Proceedings of International Conference on Multimedia and Expo

Conference Date: 30 July-2 Aug. 2000 Conference Location: New York, NY, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Satellite television, the Web and the increasing deployment of digital video and audio have changed the ways in which media content is used. Media content is increasingly being reused (rebroadcast and re-purposed). The Web also allows for content to be downloaded by users (a prime example is MP3). This digitization of media along with the changes in the distribution mechanisms gives rise to a new problem termed media tracking. Media tracking is the problem of keeping track of when and where a particular known piece of media has been used. Examples include, tracking when (at what time) and where (which channel) a particular TV commercial was aired. Analogously, on the Web, when (data and time) and where (URL) was a particular piece of content available. This paper presents a novel feature based indexing scheme, which can be used as the search or detection engine in the media tracking process. The technique presented performs the same function for temporal media streams as Internet search engines do in the text domain. (11 Refs)

Subfile: C

Descriptors: indexing; information resources; Internet; multimedia systems; search engines

Identifiers: feature based indexing; media tracking; satellite television; World Wide Web; digital video; digital audio; media content; TV commercial; search engine; temporal media streams; Internet

Class Codes: C7240 (Information analysis and indexing); C7210N (Information networks); C6130M (Multimedia); C7250 (Information storage and retrieval)

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6/5/2 (Item 2 from file: 2)

DIALOG(R) File 2: INSPEC

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6488757 INSPEC Abstract Number: C2000-03-6160M-002

Title: Video libraries: from ingest to distribution

Author(s): Bolle, R.; Hampapur, A.

Author Affiliation: IBM Thomas J. Watson Res. Center, Yorktown Heights, NY, USA

Conference Title: Visual Information and Information Systems. Third International Conference, VISUAL'99. Proceedings (Lecture Notes in Computer Science Vol.1614) p.15-18

Editor(s): Huijsmans, D.P.; Smeulders, A.W.M.

Publisher: Springer-Verlag, Berlin, Germany

Publication Date: 1999 Country of Publication: Germany xviii+827 pp.

ISBN: 3 540 66079 8 Material Identity Number: XX-1999-00174

Conference Title: Proceedings of 3rd International Conference on Visual

Information Systems

Conference Sponsor: Shell Nederland; Netherlands Comput. Sci. Res. Found.

; Adv. School for Comput. & Imaging; et al

Conference Date: 2-4 June 1999 Conference Location: Amsterdam, Netherlands

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Production, transmission and storage of video will eventually all be in digital form. Additionally, there is a need to organize video efficiently in databases so that videos are easily ingested, retrieved, viewed and distributed. We address and discuss many of the issues associated with video database management. (10 Refs)

Subfile: C

Descriptors: database indexing; video databases; video signal processing Identifiers: video libraries; video database management; multimedia library; processing video; video analysis; annotations; infrastructural demands; video management systems

Class Codes: C6160M (Multimedia databases); C6160S (Spatial and pictorial databases); C5260D (Video signal processing)

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6/5/3 (Item 3 from file: 2)

DIALOG(R) File 2: INSPEC

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5828992 INSPEC Abstract Number: B9803-6430H-007, C9803-6130M-016

Title: Video query and retrieval

Author(s): Bolle, R.M.; Boon-Lock Yeo; Yeung, M.M.

Author Affiliation: IBM Thomas J. Watson Res. Center, Yorktown Heights, NY, USA

Conference Title: Advanced Topics in Artificial Intelligence. 10th Australian Joint Conference on Artificial Intelligence, AI'97. Proceedings p.13-24

Editor(s): Sattar, A.

Publisher: Springer-Verlag, Berlin, Germany

Publication Date: 1997 Country of Publication: Germany xvii+516 pp.

ISBN: 3 540 63797 4 Material Identity Number: XX97-03002

Conference Title: Advanced Topics in Artificial Intelligence. 10th Australian Joint Conference on Artificial Intelligence, AI'97. Proceedings Conference Sponsor: ACS Nat. Committee on Artificial Intelligence & Expert Syst.; Australian Artificial Intelligence Inst.; et al

Conference Date: 30 Nov.-4 Dec. 1997 Conference Location: Perth, WA, Australia

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: All video will eventually become fully digital-there seems to be no way around it. Consequently, digital video databases will become more and more pervasive and finding video in large digital video databases will become a problem just like it is a problem today to find video in analog video databases. The digital form of the video, however, opens up tremendous possibilities. Just like it is possible today to retrieve text documents from large text document databases by querying document content represented by indices, it will become possible to index digital video databases based (semi) automatically derived indices. We address the problem of automatic video annotation-associating semantic meaning with video segments to aid in content based video retrieval. We present a novel framework of structural video analysis which focuses on the processing of low level visual data cues to obtain high level (structural and semantic) video interpretations. Additionally, we propose a flexible framework for video query formulation to aid rapid retrieval of video. This framework is meant to accommodate the "depth first searcher"-i.e., the power user, the "breadth first searcher", and the casual browser. (21 Refs)

Subfile: B C

Descriptors: indexing; information retrieval; interactive video;

multimedia computing; tree searching

Identifiers: video retrieval; video query; digital video databases;

automatically derived indices; automatic video annotation; semantic meaning; video segments; content based video retrieval; structural video analysis; low level visual data cues; high level video interpretations; video query formulation; rapid retrieval; depth first searcher; power user; casual browser; breadth first searcher

Class Codes: B6430H (Video recording); B6210R (Multimedia communications); C6130M (Multimedia); C6160S (Spatial and pictorial databases); C7250R (Information retrieval techniques); C7240 (Information analysis and indexing); C6120 (File organisation); C1160 (Combinatorial mathematics) Copyright 1998, IEE

6/5/4 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

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05962102 E.I. No: EIP01526774897

Title: Feature based indexing for media tracking

Author: Hampapur, A.; Bolle, R.

Corporate Source: IBM TJ Watson Research Center, Hawthorne, NY 10532, United States

Conference Title: 2000 IEEE International Conference on Multimedia and Expo (ICME 2000)

Conference Location: New York, NY, United States Conference Date: 20000730-20000802

E.I. Conference No.: 58780

Source: IEEE International Conference on Multi-Media and Expo n III/WEDNESDAY 2000. p 1709-1712 (IEEE cat n 00TH8532)

Publication Year: 2000

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical); X; (Experimental)

Journal Announcement: 0112W5

Abstract: Satellite television, the Web and the increasing deployment of digital video and audio have changed the ways in which media content is used. Media content is increasingly being reused (rebroadcast and re-purposed). The web also allows for content to be down-loaded by users (a prime example is MP3). This digitization of media along with the changes in the distribution mechanisms gives rise to a new problem termed media tracking. Media tracking is the problem of keeping track of when and where a particular known piece of media has been used. Examples include, tracking when (at what time) and where (which channel) a particular TV commercial was aired. Analogously, on the web, when (date and time) and where (URL) was a particular piece of content available. This paper presents a novel feature based indexing scheme, which can be used as the search or detection engine in the media tracking process. The technique presented here performs the same function for temporal media streams as Internet search engines do in the text domain. 11 Refs.

Descriptors: Multimedia systems; Indexing (of information); Feature extraction; Subscription television; Websites; Image processing; User interfaces; Search engines; Online searching; Mathematical models Identifiers: Media tracking; Digital videos

Classification Codes:

723.5 (Computer Applications); 903.1 (Information Sources & Analysis); 716.4 (Television Systems & Equipment); 722.2 (Computer Peripheral Equipment); 903.3 (Information Retrieval & Use)

723 (Computer Software, Data Handling & Applications); 903 (Information Science); 716 (Electronic Equipment, Radar, Radio & Television); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING); 90 (ENGINEERING, GENERAL); 71 (ELECTRONICS & COMMUNICATION ENGINEERING)

6/5/5 (Item 1 from file: 65)
DIALOG(R)File 65:Inside Conferences
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04691604 INSIDE CONFERENCE ITEM ID: CN049003006

MHMII-L2.2: A REAL-TIME PROTOTYPE FOR SMALL VOCABULARY AUDIO-VISUAL ASR
Connell, J.; Haas, N.; Marcheret, E.; Neti, C.; Potamianos, G.;
Velipasalar, S.
CONFERENCE: International conference on multimedia and Expo

IEEE INTERNATIONAL CONFERENCE ON MULTIMEDIA AND EXPO, 2003; VOL 2 P: II-469-472

IEEE, 2003 ISBN: 0780379659

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE SPONSOR: Institute of Electrical and Electronics Engineers

CONFERENCE LOCATION: Baltimore, MD 2003; Jul (200307) (200307)

6/5/6 (Item 2 from file: 65)
DIALOG(R)File 65:Inside Conferences
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03438513 INSIDE CONFERENCE ITEM ID: CN036280219

Feature Based Indexing for Media Tracking

Hampapur, A.; Bolle, R.

CONFERENCE: International conference on multimedia and Expo IEEE INTERNATIONAL CONFERENCE ON MULTIMEDIA AND EXPO, 2000; VOLUME 3 P: 1709-1712

IEEE, 2000

ISBN: 0780365364

LANGUAGE: English DOCUMENT TYPE: Conference Papers

CONFERENCE SPONSOR: Institute of Electrical and Electronics Engineers

. .

CONFERENCE LOCATION: New York, NY

CONFERENCE DATE: Jul 2000

BRITISH LIBRARY ITEM LOCATION: 4362.949586

NOTE:

Also known as ICME 2000

DESCRIPTORS: ICME; multimedia; expo; IEEE

6/5/7 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
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2179413 H.W. WILSON RECORD NUMBER: BAST98044020

Video query: research directions

Bolle, R. M; Yeo, B.-L; Yeung, M. M

IBM Journal of Research and Development v. 42 no2 (Mar. 1998) p. 233-52 DOCUMENT TYPE: Feature Article ISSN: 0018-8646 LANGUAGE: English

RECORD STATUS: Corrected or revised record

ABSTRACT: As digital video databases become more and more pervasive, finding video in large databases becomes a major problem. Because of the nature of video (streamed objects), accessing the content of such data bases is inherently a time-consuming operation. Enabling intelligent means of video retrieval and rapid video viewing through the processing, analysis, and interpretation of visual content are, therefore, important topics of research. In this paper, we survey the art of video query and retrieval and propose a framework for video-query formulation and video retrieval based on an iterated sequence of navigating, searching, browsing, and viewing. We describe how the rich information media of video in the forms of image, audio, and text can be appropriately used in each stage of the search process to retrieve relevant segments. Also, we address the problem of automatic video annotation-attaching meanings to video segments to aid the query steps. Subsequently, we present a novel framework of structural video analysis that focuses on the processing of high-level

features as well as low-level visual cues. This processing augments the semantic interpretation of a wide variety of long video segments and assists in the search, navigation, and retrieval of video. We describe several such techniques. Reprinted by permission of the publisher.

DESCRIPTORS: Image query processing; Multimedia information systems;

6/5/8 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

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13766254 PASCAL No.: 98-0478681

Video query : Research directions

Multimedia systems

BOLLE R M ; YEO B L; YEUNG M M

DAN Asit, ed; FELDMAN Stuart, ed; SERPANOS Dimitrios, ed

IBM Research Division, Thomas J. Watson Research Center, P.O. Box 218, Yorktown Heights, New York 10598, United States; Microcomputer Research Laboratories, Intel Corporation, 2200 Mission College Blvd., Santa Clara, California 95052, United States

IBM Research Division, Thomas J. Watson Research Center, P.O. Box 704, Yorktown Heights, New York 10598, United States; Department of Computer Science, University of Crete, P.O. Box 1470, 71110 Heraklion, Crete, Greece Journal: IBM journal of research and development, 1998, 42 (2) 233-252 ISSN: 0018-8646 CODEN: IBMJAE Availability: INIST-8473; 354000076922220060

No. of Refs.: 55 ref.

Document Type: P (Serial) ; A (Analytic) Country of Publication: United States

Language: English

As digital video databases become more and more pervasive, finding video in large databases becomes a major problem. Because of the nature of video (streamed objects), accessing the content of such databases is inherently a time-consuming operation. Enabling intelligent means of video retrieval and rapid video viewing through the processing, analysis, and interpretation of visual content are, therefore, important topics of research. In this paper, we survey the art of video query and retrieval and propose a framework for video-query formulation and video retrieval based on an iterated sequence of navigating, searching, browsing, and viewing. We describe how the rich information media of video in the forms of image, audio, and text can be appropriately used in each stage of the search process to retrieve relevant Also, we address the problem of automatic video segments. annotation-attaching meanings to video segments to aid the query steps. Subsequently, we present a novel framework of structural video analysis that focuses on the processing of high-level features as well as low-level visual cues. This processing augments the semantic interpretation of a wide variety of long video segments and assists in the search, navigation, and retrieval of video. We describe several such techniques.

English Descriptors: Database; Video technique; Database query; Information browsing; Information retrieval

French Descriptors: Base donnee; Technique video; Interrogation base donnee; Navigation information; Recherche information

Classification Codes: 001A01E03C; 205

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s3
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S4
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s7
         1076
                S7 AND (MULTIMEDIA OR MULTI()MEDIA)
S.8
                S7 AND (CLASSIFY? OR INDEXING)
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                S8 OR S9
S10
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         (c) 2004 The Gale Group
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
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         (c) 2004 IDG Communications
File 696: DIALOG Telecom. Newsletters 1995-2004/Nov 01
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10/5/1
                  (Item 1 from file: 2)
DIALOG(R)File
                        2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.
                 INSPEC Abstract Number: C9401-1230-093
 Title: A non-well-founded-approach to terminological cycles
   Author(s): Dionne, R.; Mays, E.; Oles, F.J.
   Author Affiliation: IBM Thomas J. Watson Res. Center, Yorktown Heights,
NY, USA
   Conference Title: AAAI-92. Proceedings Tenth National Conference on
Artificial Intelligence p.761-6
   Publisher: AAAI Press, Menlo Park, CA, USA
   Publication Date: 1992 Country of Publication: USA
   Conference Sponsor: American Assoc. for Artificial Intelligence
                                                                      Conference Location: San Jose, CA,
   Conference Date: 12-16 July 1992
USA
                                       Document Type: Conference Paper (PA)
   Language: English
   Treatment: Theoretical (T)
   Abstract: The authors propose a new approach to intensional semantics of
term subsumption languages. They introduce concept algebras, whose signatures are given by sets of primitive concepts, roles, and the operations of the language. For a given set of variable, standard results give free algebras. They next define, for a given set of concept sets of conce
definitions, a term algebra, as the quotient of the free algebra by a congruence generated by the definitions. The ordering on this algebra is
called descriptive subsumption (contains Delta). They also construct a
universal concept algebra, as a non-well-founded set given by the greatest
fixed point of a certain equation. The ordering on this algebra is called
structural subsumption (>or= Delta ). They prove there are unique mappings
from the free algebras, to each of these, and establish that their method
for classifying cycles in a term subsumption language, K-REP, consists of
constructing accessible pointed graphs, representing terms in the universal
concept algebra, and checking a simulation relation between terms. (7
 Refs)
   Descriptors: algebra; formal languages; inference mechanisms; knowledge
representation
   Identifiers: non-well-founded-approach; terminological cycles;
intensional semantics; term subsumption languages; concept algebras;
primitive concepts; roles; operations; free algebras; term algebra; K-REP;
universal concept algebra; simulation relation
   Class Codes: C1230 (Artificial intelligence); C4210 (Formal logic)
                     (Item 1 from file: 8)
DIALOG(R) File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
                  E.I. No: EIP93030724020
   Title: Non-well-founded approach to terminological cycles
   Author: Dionne, Robert; Mays, Eric; Oles, Frank J.
   Corporate Source: IBM T. J. Watson Research Cent, Yorktown Heights, NY,
USA
   Conference Title: Proceedings Tenth National Conference on Artificial
Intelligence - AAAI-92
   Conference Location: San Jose, CA, USA
                                                                         Conference Date: 19920712
   Sponsor: American Assoc for Artificial Intelligence
   E.I. Conference No.: 17964
   Source: Proceedings Tenth National Conference on Artificial Intelligence
Proc Tenth Natl Conf Artif Intell AAAI 92 1992. Publ by AAAI, Menlo Park,
CA, USA. p 761-766
   Publication Year: 1992
   ISBN: 0-262-51063-4
   Language: English
```

Document Type: CA; (Conference Article) Treatment: T; (Theoretical)

Abstract: In this paper, we proposed a new approach to intensional

Journal Announcement: 9306W1

semantics of term subsumption languages. We introduce concept algebras, whose signatures are given by sets of primitive concepts, roles, and the operations of the language. For a given set of variables, standard results give us free algebras. We next defined, for a given set of concept definitions, a term algebra, as the quotient of the free algebra by a congruence generated by the definitions. The ordering on this algebra is called descriptive subsumption (@@ Delta). We also construct a universal concept algebra, as a non-well-founded set given by the greatest fixed point of a certain equation. The ordering on this algebra is called structural subsumption (@@ Delta). We prove there are unique mappings from the free algebras, to each of these, and establish that our method for classifying cycles in a term subsumption language, K-REP, consists of constructing accessible pointed graphs, representing terms in the universal concept algebra, and checking a simulation relation between terms. (Author abstract) 6 Refs.

Descriptors: *Artificial intelligence; Algebra; Computation theory; Mathematical techniques

Identifiers: Terminological cycles; Concept algebra; Term subsumption language K-REP; Structural subsumption

Classification Codes:

723.4 (Artificial Intelligence); 921.1 (Algebra); 723.1 (Computer Programming)

723 (Computer Software); 921 (Applied Mathematics)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

10/5/3 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
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07263107 Genuine Article#: 141NK Number of References: 33

Title: Operative treatment of displaced intraarticular fractures of the os calcis with the ASIF calcaneal plate

Author(s): Boack DH (REPRINT); Wichelhaus A; Mittlmeier T; Hoffmann R; Haas NP

Corporate Source: HUMBOLDT UNIV, FAK MED, KLIN UNFALL & WIEDERHERSTELLUNGSCHIRURG, UNIV KLINIKUM CHARITE/D-13353 BERLIN//GERMANY/ (REPRINT)

Journal: CHIRURG, 1998, V69, N11 (NOV), P1214-1223

ISSN: 0009-4722 Publication date: 19981100

Publisher: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010

Language: German Document Type: ARTICLE

Geographic Location: GERMANY

Subfile: CC CLIN--Current Contents, Clinical Medicine

Journal Subject Category: SURGERY

Abstract: From August 1992 to March 1997, 66 patients with 71 displaced intraarticular calcaneal fractures were prospectively examined after an operative treatment using an extended lateral approach and the ASIF calcaneal plate followed by early functional postoperative treatment (mean follow-up 25 months, retrieval rate 96 %). To classify the type of fracture and to verify the results of reduction and of retention CT scans in the coronal and transverse plane were performed pre- and postoperatively and on the day of assessment. The Zwipp Score was used for clinical evaluation. After fractures with 5 to 8 points according to the calcaneal fracture scale, 97% of the patients had an anatomical or near anatomical reduction of the posterior facet and the clinical outcome in 82 % of the patients was graded as good or excellent. In 70 % of patients with a fracture rated 9 to 10 points a good reduction was demonstrated and clinically there were 67 % good or excellent results. But in the fractures with 11 to 12 points, despite 40 % good reductions, the clinical outcome was graded as good in 10 % of the patients only. However, if the postoperative displacement of the posterior facet was more than 2 mm no patient had a good result independent of the type of fracture. Due to restoration of the geometry of the most comminuted fracture types and the immediate partial weight bearing secondary soft tissue problems could be minimized without any loss of articular reduction. Anatomical reduction and stable internal

fixation together with adequate physical therapy are apparently preconditions but not a guarantee for a good clinical result after displaced calcaneal fractures.

Descriptors--Author Keywords: intraarticular fractures of os calcis; CT classification; open reduction; internal fixation; results Identifiers--KeyWord Plus(R): INTERNAL-FIXATION; CLASSIFICATION; REDUCTION; SYSTEM

Cited References:

BAUER G, 1996, V67, P1129, CHIRURG BAUMGAERTEL FR, 1993, V290, P132, CLIN ORTHOPAEDICS BENIRSCHKE SK, 1993, V292, P132, CLIN ORTHOPAEDICS BEZES H, 1984, V87, P363, UNFALLHEILKUNDE BRALY WG, 1985, V6, P90, FOOT ANKLE BUCH J, 1989, V92, P595, UNFALLCHIRURG BUCKLEY RE, 1996, CLIN CT CORRELATION EASTWOOD DM, 1993, V75, P189, J BONE JOINT SURG BR FERNANDEZ DL, 1993, V290, P108, CLIN ORTHOPAEDICS FUNK EM, 1995, V98, P501, UNFALLCHIRURG KERR PS, 1996, V27, P35, INJURY KORTMANN HR, 1992, V95, P541, UNFALLCHIRURG KUNER EH, 1995, V98, P320, UNFALLCHIRURG LAUGHLIN RT, 1996, V17, P71, FOOT ANKLE INT LEUNG KS, 1993, V75, P196, J BONE JOINT SURG BR LEUNG KS, 1995, V7, P198, OPERAT ORTHOP TRAUMA LOWERY RBW, 1996, V17, P360, FOOT ANKLE INT MELCHER GA, 1989, V24, P62, AKTUEL CHIR MOCKWITZ J, 1997, V5, P47, OSTEOSYNTHESE INT MUTSCHLER W, 1993, V16, P297, ORTHOPEDICS PALEY D, 1993, V290, P125, CLIN ORTHOPAEDICS PARMAR HV, 1993, V75, P932, J BONE JOINT SURG BR. SANDERS R, 1993, V290, P87, CLIN ORTHOPAEDICS SANDERS R, 1992, V6, P252, J ORTHOP TRAUMA SOEUR R, 1975, V57, P413, J BONE JOINT SURG BR STEPHENSON JR, 1993, V290, P68, CLIN ORTHOPAEDICS STEPHENSON JR, 1987, V69, P115, J BONE JOINT SURG AM THODARSON DB, 1996, V17, P2, FOOT ANKLE INT TSCHERNE H, 1982, V85, P111, UNFALLHEILKUNDE ZWIPP H, 1993, V290, P76, CLIN ORTHOPAEDICS ZWIPP H, 1995, V7, P237, OPERAT ORTHOP TRAUMA ZWIPP H, 1988, V91, P507, UNFALLCHIRURG ZWIPP H, 1989, V92, P117, UNFALLCHIRURG

10/5/4 (Item 2 from file: 34)
DIALOG(R) File 34: SciSearch(R) Cited Ref Sci
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Journal Subject Category: SURGERY

O3667324 Genuine Article#: PV069 Number of References: 54

Title: INSTABILITIES OF THE SHOULDER JOINT
Author(s): SUDKAMP NP; GRANRATH M; HOFFMANN R; HAAS NP
Corporate Source: FREE UNIV BERLIN, KLINIKUM RUDOLF VIRCHOW, UNFALL&
WIEDERHERSTELELUNGSCHIRURG/D-13353 BERLIN//GERMANY/
Journal: CHIRURG, 1994, V65, N11 (NOV), P901-909
ISSN: 0009-4722
Language: GERMAN Document Type: ARTICLE
Geographic Location: GERMANY
Subfile: SciSearch; CC CLIN--Current Contents, Clinical Medicine

Abstract: In all shoulder instabilities it is very important to **classify** the type of instability precisely in order to choose the right form of therapy and predict the results. The acronyms TUBS, which means traumatic instability, unidirectional, Bankart lesion, and good response to surgery, and AMBRI, which means atraumatic aetiology, multidirectional, and good for rehabilitation, represent the complete range of possible instabilities. We discuss the subtypes in the differentiation of various instabilities and the different causes and pathologies for instability, the clinical and radiological tests

possible, and the different surgical treatment options, as well as the results in the literature. A modification of the Bankart procedure and the arthroscopic Caspari capsulorrhaphy procedure for traumatic instabilities are described. The capsular T-shift by Neer and Foster is explained as a surgical treatment for multidirectional instability. Descriptors--Author Keywords: SHOULDER INSTABILITY; CLASSIFICATION; CLINICAL EXAMINATION; RADIOLOGICAL DIAGNOSTICS; SURGICAL TREATMENT Identifiers--Keywords Plus: ANTERIOR; DISLOCATION; CAPSULE Research Fronts: 92-3448 001 (ROTATOR CUFF TEARS; MR IMAGING OF THE NORMAL SHOULDER; SUPRASPINATUS TENDON IN ASYMPTOMATIC VOLUNTEERS) Cited References:

BANKART ASB, 1938, V26, P23, BRIT J SURG BANKART ASB, 1923, V2, P1123, BRIT MED J BIAZINA ME, 1969, V51, P1037, J BONE JOINT SURG BIGLIANI LU, 1990, V6, P301, ARTHROSCOPY BROCA A, 1890, V4, P312, B SOC ANAT PARIS BROCA A, 1890, V4, P416, B SOC ANAT PARIS 5ME CASPARI RB, 1990, OPERATIVE ARTHROSCOP COFIELD RH, 1987, V223, P32, CLIN ORTHOPAEDICS COFIELD RH, 1993, V291, P44, CLIN ORTHOPAEDICS CONNOLLY JF, 1972, V21, S42, HUMERAL HEAD DEFECTS ENGBERTSEN I, 1993, V291, P29, CLIN ORTHOPAEDICS ENNKER J, 1985, V88, P198, UNFALLCHIRURG GERBER C, 1984, V66, P551, J BONE JOINT SURG BR HALL RH, 1959, V41, P489, J BONE JOINT SURG AM HARRYMAN DT, 1992, V74, P53, J BONE JOINT SURG AM HAWKINS RB, 1989, V5, P122, ARTHROSCOPY HAWKINS RJ, 1986, V206, P192, CLIN ORTHOPAEDICS HAWKINS RJ, 1988, V12, P727, ORTHOP T HAWKINS RJ, 1983, V10, P1270, ORTHOPEDICS HENRY JH, 1982, V10, P135, AM J SPORTS MED HURLEY JA, 1992, V20, P396, AM J SPORT MED IANNOTTI JP, 1991, V73, P17, J BONE JOINT SURG AM JEROSCH J, 1993, V22, P294, ORTHOPADE JOBE FW, 1991, V19, P428, AM J SPORT MED JOHNSON LL, 1986, ARTHROSCOPIC SURGERY KVITNE RS, 1993, V291, P107, CLIN ORTHOPAEDICS LAWRENCE WS, 1915, V127, P781, AJR LIPPITT S, 1993, V291, P20, CLIN ORTHOPAEDICS MCLAUGHLIN HL, 1967, V7, P191, J TRAUMA MORGAN CD, 1987, V3, P111, ARTHROSCOPY NEER CS, 1980, V62, P897, J BONE JOINT SURG AM NEVIASER RJ, 1993, V291, P103, CLIN ORTHOPAEDICS NEVIASER RJ, 1988, V70, P1308, J BONE JOINT SURG AM PERTHES G, 1906, V85, P199, DEUTSCHE Z CHIRURGIE POST M, 1993, V291, P97, CILN ORTHOP REEVES B, 1969, V43, P255, ANN R COLL SURG ENGL RESCH H, 1991, V20, P273, ORTHOPADE RESCH H, 1989, V92, P407, UNFALLCHIRURG ROCKWOOD CA, 1975, FRACTURES ADULTS ROKOUS JR, 1972, V82, P84, CLIN ORTHOPAEDICS ROWE CR, 1981, V63, P863, J BONE JOINT SURG AM ROWE CR, 1988, SHOULDER RUBIN SA, 1974, V110, P725, RADIOLOGY SHUNAN WP, 1983, V141, P581, AJR SILLIMAN JF, 1993, V291, P7, CLIN ORTHOPAEDICS SIMONET WT, 1984, V12, P19, AM J SPORT MED SPEER KP, 1993, V291, P67, CLIN ORTHOPAEDICS SUDKAMP NP, 1992, V4, P1, OPERAT ORTHOP TRAUMA THOMAS SC, 1989, V71, P506, J BONE JOINT SURG AM TIBONE JE, 1993, V291, P124, CLIN ORTHOPAEDICS TURKEL SJ, 1981, V63, P1208, J BONE JOINT SURG AM WHEELER JH, 1989, V5, P213, ARTHROSCOPY WOLF EM, 1991, V1, P184, OPER TECH ORTHOP ZARINS B, 1993, V291, P75, CLIN ORTHOPAEDICS

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10/5/5
         (Item 1 from file: 65)
DIALOG(R)File 65:Inside Conferences
(c) 2004 BLDSC all rts. reserv. All rts. reserv.
          INSIDE CONFERENCE ITEM ID: CN049003006
04691604
MHMII-L2.2: A REAL-TIME PROTOTYPE FOR SMALL VOCABULARY AUDIO-VISUAL ASR
 Connell, J.; Haas, N.; Marcheret, E.; Neti, C.; Potamianos, G.;
Velipasalar, S.
 CONFERENCE: International conference on multimedia and Expo
 IEEE INTERNATIONAL CONFERENCE ON MULTIMEDIA AND EXPO, 2003; VOL 2 P:
   II-469-472
 IEEE, 2003
 ISBN: 0780379659
 LANGUAGE: English DOCUMENT TYPE: Conference Papers
   CONFERENCE SPONSOR: Institute of Electrical and Electronics Engineers
   CONFERENCE LOCATION: Baltimore, MD 2003; Jul (200307) (200307)
 BRITISH LIBRARY ITEM LOCATION: 4362.949586
 DESCRIPTORS: ICME; multimedia; expo; IEEE; electrical engineers;
      electronic engineers
             (Item 1 from file: 202)
10/5/6
DIALOG(R) File 202: Info. Sci. & Tech. Abs.
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3602842

Text categorization based on regularized linear classification methods. Author(s): Zhang, Tong (tzhang@watson.ibm.com); Oles, Frank J (oles@watson.ibm.com

Corporate Source: IBM T.J. Watson Research Center, Yorktown Heights, NY 10598; IBM T.J. Watson Research Center, Yorktown Heights, NY 10598

Information Retrieval vol. 4, no. 1, pages 5-31

Publication Date: April 2001

ISSN: 1386-4564

Journal URL: http://www.kluweronline.nl

Publisher URL: http://www.wkap.nl

Language: English

Document Type: Journal Article

Record Type: Abstract

Journal Announcement: 3607

A number of linear classification methods such as the linear least squares fit (LLSF), logistic regression, and support vector machines (SVMs) have been applied to text categorization problems. These methods share the similarity by finding hyperplanes that approximately separate a class of document vectors from its complement. Yet SVMs are so far considered special in that they have been demonstrated to achieve state-of-the-art performance. It is thus worthwhile to understand whether such good performance is unique to the SVM design, or if it can also be achieved by other linear classification methods. Compares a number of known linear classification methods and some variants in the framework of regularized linear systems. Discusses the statistical and numerical properties of these algorithms, focusing on text categorization. Provides some numerical experiments to illustrate the algorithms on some datasets.

Descriptors: Classification; Text Processing; Linear Systems; Algorithms Classification Codes and Description: 4.7 (Classification, Indexing, and Thesauri)

and the second s

Main Heading: Information Recognition and Description

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10/5/7 (Item 1 from file: 239)
DIALOG(R)File 239:Mathsci
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A non-well-founded approach to terminological cycles.

AAAI-92. Proceedings, Tenth National Conference on Artificial

Intelligence (San Jose, CA, 1992)

Dionne, Robert (IBM Thomas J. Watson Research Center, Yorktown Heights, New York, 10598)

Mays, Eric (IBM Thomas J. Watson Research Center, Yorktown Heights, New York, 10598)

Oles, Frank J. (IBM Thomas J. Watson Research Center, Yorktown Heights, New York, 10598

Corporate Source Codes: 1-IBM; 1-IBM; 1-IBM 1992

Amer. Assoc. Artif. Intell., Menlo Park, CA,; 761--766,,

Language: English Summary Language: English

Document Type: Proceedings Paper

Journal Announcement: 9307

Subfile: MR (Mathematical Reviews) AMS

Abstract Length: MEDIUM (17 lines)

Summary: ``In this paper, we propose a new approach to intensional semantics of term subsumption languages. We introduce concept algebras, whose signatures are given by sets of primitive concepts, roles, and the operations of the language. For a given set of variables, standard results give us free algebras. We next define, for a given set of concept definitions, a term algebra, as the quotient of the free algebra by a congruence generated by the definitions. The ordering on this algebra is called descriptive subsumption \$(\sqsupseteq\sb \Delta)\$. We also construct a universal concept algebra, as a non-well-founded set given by the greatest fixed point of a certain equation. The ordering on this algebra is called structural subsumption \$(\succeq\sb \Delta)\$. We prove there are unique mappings from the free algebras to each of these, and establish that our method for classifying cycles in a term subsumption language, K-REP, consists of constructing accessible pointed graphs, representing terms in the universal concept algebra, and checking a simulation relation between terms.''

{For the entire collection see MR 93j:68007}.

Reviewer: Summary

Review Type: Abstract

Proceedings Reference: 93j#68007; 1 203 116

Descriptors: *68Q55 -Computer science (For papers involving machine computations and programs in a specific mathematical area, see Section --04 in that area)-Theory of computing-Semantics (See also 03B70, 06B35)

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             Description
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            OUS OR SEVERAL OR GLOBAL OR UNIVERSAL
             MULTIMEDIA OR MULTI() MEDIA OR MEDIA OR PHOTOS OR PHOTOGRAP-
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             AV OR FILM? OR VIDEO? OR MOVIE? DATA OR VOICE OR AUDIO? OR V-
            ISUAL? OR IMAGE? OR GRAPHIC?
S3
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             OR SEVERAL
             DISPARATE OR DIFFERENT OR DISSIMILAR OR DIVERGENT OR DIVER-
            SE OR UNLIKE OR VARIANT OR VARIOUS
S5
      546588 MODALITY OR MODALITIES OR MODE? OR MODAL?
     1534396 VISUAL? OR IMAGE? OR PICTUR? OR PICTORIAL? OR GRAPHIC?
S6
s7
     2019244 TEXTUAL OR TEXT? ? OR DATA
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     1451642 COMBIN? OR UNIFIED OR UNIFYING OR CONSOLIDAT? OR MERGE? OR
            JOIN? OR MERGING OR UNITE?
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     3931886 CREATE? OR GENERATE? OR PRODUCE? OR DEVELOP? ? OR ORIGINAT-
            E? OR MAKE?
S10
     4315541 FEATURE? OR CHARACTERISTIC? OR TRAIT? OR DESCRIPTION? OR A-
            UTHORIT? OR ATTRIBUT? OR CLASSIFICATION?
S11
     4975378 VECTOR? OR COORDINATES OR PATH? OR LOCAT? OR ADDRESS? OR P-
            LACE? OR POSITION? OR LOCAL?
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     4442970 CONCATENAT? OR CONNECT? OR LINK? ? OR COMBINE? OR RELATE? -
            OR RELATING OR MATCH?
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S13
     12345 S4 (3W)S5
S14
       27934 S4 (3N) S6
S15
      19014 S5 (3N) S6
S16
      28569 S5 (3N) S7
S17
S18
      35525 S6 (3N) S10
      36431 S7 (3N) S10
S19
S20
       9340 S18 AND S11
       9486 S19 AND S11
S21
       13 S8 AND S9 AND S20 AND S16
S22
          23 S8 AND S9 AND S21 AND S17
S23
S24
          2 S12 AND (S1 (3N) S20) AND (S1 (3N) S21) AND (S8 (3N) S10 (-
           3N) S11)
S25
           6 S13 AND S14 AND S15 AND S16 AND S17
          41 S22 OR S23 OR S24 OR S25
          18 S26 AND IC=(G06F? OR G06E? OF G06G?)
          9 S26 AND MC=(T01-J04C OR T01-J10B2 OR T01-S03)
S28
S29
          23 S27 OR S28
File 347: JAPIO Nov 1976-2004/Jun (Updated 041004)
        (c) 2004 JPO & JAPIO
File 350: Derwent WPIX 1963-2004/UD, UM & UP=200470
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29/5/1 (Item 1 from file: 347)

DIALOG(R) File 347: JAPIO

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06745204 **Image available**

MANUFACTURING ASSISTING DEVICE OF ASSEMBLED STRUCTURE AND MANUFACTURE OF ASSEMBLED STRUCTURE

PUB. NO.:

2000-331058 [JP 2000331058 A]

PUBLISHED:

November 30, 2000 (20001130)

INVENTOR(s): TANAKA HIDEYUKI

TANAKA FUTOSHI

TAKINAMI JUNICHI

KATO MITSUAKI

APPLICANT(s): TORAY IND INC

APPL. NO.: 11-141450 [JP 99141450]

FILED:

May 21, 1999 (19990521)

INTL CLASS:

G06F-017/50 ; A41H-043/00

ABSTRACT

PROBLEM TO BE SOLVED: To easily and exactly create data to be required for assembly calculation, etc., by creating data to be used for predicting calculation of an assembled state of assembled structure by converting it into a specified format based on manufacturing data, etc.

SOLUTION: Information about material classification, etc., is extracted from CAD data and required data for data base are created by a creation assisting means 220 for managing data. **Joined** data in the specified format are **created** by a creation assisting means 215 for parts **joining** information and dynamical characteristics data is set by using the material classification information by creation assisting means 217 for material characteristics information by every part. Data about a shape model of a coated object is inputted, a contact number to hold position relation is registered in both of parts of the assembled structure and the coated object model by a dressing information assisting means 216. Next, calculation to dress the assembled structure on the coated object is performed from a part model of clothing to be constituted of very small elements and actual dressing calculation is further performed in consideration of contact, etc. between the surface of a human body model and a clothing model by a dressing calculating means 222.

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29/5/2 (Item 2 from file: 347)

DIALOG(R) File 347: JAPIO

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**Image available*

METHOD FOR ANALYZING ASSEMBLY STATE OF ASSEMBLY STRUCTURE, ANALYZING METHOD FOR WEARING STATE OF CLOTHING, MANUFACTURE OF CLOTHING, AND MANUFACTURE SUPPORTING DEVICE

PUB. NO.:

10-134095 [JP 1013409**≸**

PUBLISHED:

May 22, 1998 (1998052**2**)

INVENTOR(s): TANAKA HIDEYUKI TANAKA FUTOSHI

APPLICANT(s): TORAY IND INC [000215] (A Japanese Company or Corporation),

JP (Japan)

APPL. NO.:

08-285408 [JP/96285408] October 28, 1996 (19961028)

FILED: INTL CLASS:

JAPIO CLASS:

[6] G06F-017/50; A41H-043/00; A41H-003/00 45.4 (INFORMATION PROCESSING -- computer Applications); 30.3

(MISCELLANEOUS GOODS -- Clothing & Personal Belongings)

JAPIO KEYWORD: R060 (MACHINERY -- Automatic Design); R102 (APPLIED

ELECTRONICS -- Video Disk Recorders, VDR)

PROBLEM TO BE SOLVED: To precisely predict the assembly state of the assembly structure of clothing, etc., in a shorter time by generating a solid shape model after joining on the basis of shape information on component models and joining data on joining positions of the component models, and reconstituting this solid shape model as a reconstituted solid shape model consisting of plural elements.

SOLUTION: The joining data and characteristic information on materials are inputted and a formed human body shape model is inputted (step 1). A component model is generated while so divided into elements as to have at least one refraction line in a component (step 2). A solid shape is generated by joining the components at their joining positions (step 3). The solid shape model which is assembled in three dimensions is divided into small elements, which are reconstituted to generate the reconstituted shape model (step 4). Then wearing state simulation for clothing which calculates the wearing state of the reconstituted solid shape model on a human body shape model is performed (step 5).

29/5/3 (Item 3 from file: 347)
DIALOG(R) File 347: JAPIO
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05808677 **Image available**
DEVICE FOR FORMING PICTURE AND METHOD THEREFOR

PUB. NO.: 10-091777 [JP 10091777 A] PUBLISHED: April 10, 1998 (19980410)

INVENTOR(s): OZAKI YOJI

APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 08-262316 [JP 96262316] FILED: September 12, 1996 (19960912)

INTL CLASS: [6] G06T-001/60; B41J-005/30; G06F-003/12

JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 29.4

(PRECISION INSTRUMENTS -- Business Machines); 45.3 (INFORMATION PROCESSING -- Input Output Units); 45.9

(INFORMATION PROCESSING -- Other)

JAPIO KEYWORD: R002 (LASERS); R098 (ELECTRONIC MATERIALS -- Charge Transfer Elements, CCD & BBD); R102 (APPLIED ELECTRONICS -- Video Disk

Recorders, VDR); R138 (APPLIED ELECTRONICS -- Vertical

Magnetic & Photomagnetic Recording)

ABSTRACT

PROBLEM TO BE SOLVED: To provide a device and method for forming a picture in which a printing and outputting processing and a bookbinding processing can be smoothly attained even when a printing and outputting mode set for each picture data is different.

SOLUTION: When plural picture data D1, D2, and D4 whose different printing and outputting modes are set are stored as a group G1 in an image memory part (step 1), and a registered data key on a control part is selected (step 2), a display screen in a registered data mode for enabling a processing related with the picture data stored in the image memory part is obtained. When it is judged that a group output mode key is selected in this state (step S3), the display screen is changed to a group output mode display. When the designation of the group to be printed and outputted and the setting of a printing and outputting mode Mg1 is operated by a user (steps S4-S6), all the picture data D1, D2, and D4 included in the picture group G1 are printed and outputted in the printing and outputting mode Mg1 (step S7).

29/5/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

05772065 **Image available** IMAGE DISPLAY DEVICE, IMAGE DISPLAY CONTROLLER AND IMAGE DISPLAY SYSTEM

PUB. NO.: 10-055165 [JP 10055165 A] PUBLISHED: February 24\(\chi\) 1998 (19980224)

INVENTOR(s): KANDA YOJI

APPLICANT(s): FUJITSU LTD [Q00522] (A Japanese Company or Corporation), JP

(Japan)

APPL. NO.: 08-212265 [JP 06212265]/ FILED: August 12, 1996 (1996081/2)

INTL CLASS: [6] G09G-005/36; $\sqrt{G06F-003/147}$; G06F-003/153; G06T-017/00;

G09G-003/20; G09G-005/00; G09G-005/00

JAPIO CLASS: 44.9 (COMMUNICATION -- Other); 45.3 (INFORMATION PROCESSING -- Input Output Units); 45.9 (INFORMATION PROCESSING --

Other)

ABSTRACT

PROBLEM TO BE SOLVED: To enable relative relations among plural display screen parts to be freely changed and also to enable a common three-dimensional computer graphics model to be seen through plural projection planes in an image display device, a image display controller and an image display system displaying three- dimensional computer graphics model .

SOLUTION: Adjacent display screen parts 6a-6b, 6b-6c are respectively coupled with joints provided with sensors 7L, 7R and their relative positions or relative angles are measured with the sensors to be informed to a projection adjusting part 8. The projection adjusting part 8 rewrites contents of visual point description parts 2 or projection description parts 3 based on these relative positions or the relative angles. Image generating parts 4/ generate two-dimensional images of the three-dimensional graphics model stored in a model storage part 1 based on the contents to store them in image memories 5. The display screen parts 6 respectively display images stored in corresponding image memories 5.

29/5/9 (Item 5 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv.

Image available 015356725 WPI Acc No: 2003-417663/200339 XRPX Acc No: N03-333065

Computer system for video event detection, combines visual and textual feature vectors of disparate visual and textual modalities into

unified feature vector

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: BOLLE R M; HAAS N; OLES F J; ZHANG T Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date US 20030033347 A1 20030213 US 2001853191 A 20010510 200339 B

Priority Applications (No Type Date): US 2001853191 A 20010510 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes US 20030033347 A1 49 G06E-001/00

Abstract (Basic): US 20030033347 A1

NOVELTY - The computer system creates visual and textual feature vectors for disparate visual and textual modalities. The visual and textual feature vectors are concatenated into a unified feature vector .

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the

(1) multimedia stream segmenting method;

- (2) computer memory storing multimedia stream segmenting program; and (3) multimedia stream segmenting system. USE - For video event detection and for locating illegal copies of multimedia information including TV commercials, video clips, news, documentary, movie releases, weather, politics, sports such as basketball, soccer, golf, etc., on Internet or public databases, management of large video data bass, video stream segmentation, etc. ADVANTAGE - Provides a unified representation of disparate modalities of the media item being compared, resulting in well-established learning techniques. DESCRIPTION OF DRAWING(S) - The figure shows a flow chart explaining the combined computation of the disparate sources of information from a media item. pp; 49 DwgNo 3/22 Title Terms: COMPUTER; SYSTEM; VIDEO; EVENT; DETECT; COMBINATION; VISUAL; TEXT; FEATURE; VECTOR; DISPARITY; VISUAL; TEXT; UNIFIED; FEATURE; VECTOR Derwent Class: T01 International Patent Class (Main): G06E-001/00 International Patent Class (Additional): G06E-003/00; G06F-009/00; G06F-015/16; G06F-015/18; G06G-007/00 File Segment: EPI 29/5/12 (Item 8 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 014000255 WPI Acc No: 2001-484469/200153 XRPX Acc No: N01-358635 Image sequence processing for determining camera projections, involves forming image pair based on matching feature in images and determining relationship between camera projections to merge image sets Patent Assignee: CANON KK (CANO) Inventor: LYONS A R Number of Countries: 001 Number of Natents: 002 Patent Family: Applicat\No Patent No Kind Date Kind Date Week GB 2358308 Α 20010718 GB 992/787****6 Α 19991125 200153 B GB 2358308 20040324 GB 9927876 Α 19991125 200424 Priority Applications (No Type Dafe): GB 9927876 A 19991125 Patent Details: Main IP $m{t}$ Patent No Kind Lan Pg Filing Notes GB 2358308 A 140 G06T-007/00 GB 2358308 G06T-007/00 В Abstract (Basic): GB 2358308 A NOVELTY - The initial /end images are delected for each set of input images, to form an image pair based on matching features in images . The number of images between each image pair and between consecutive sets are increased. The /camera projection is calculated for each set, and the relationship between the camera projections are determined, so as to merge the sets. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (a) Storage device;
 - (b) Data processor.

USE - For processing data from still or moving image input by the camera and generate three dimensional model, to display an image of object from desired viewing positions, etc.

ADVANTAGE - By selecting separate sets of image frame within a sequence, more accurate camera transformations can be calculated, hence reduces the accumulation of error. Also, by selecting end image pairs from the input data and merging the various sets, the accuracy of

29/5/14 (Item 10 from file: 350) DIALOG(R) File 350: Derwent WPIX

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Image available 013652013

WPI Acc No: 2001-136225/200114 XRPX Acc No: N01-099042

Tracking method for tracking heads, faces, facial features within complex images , involves comparing complementary representation models to generated correlated data combined into single representation

4 4 1 1 1 1 1 1 1 1 1 1

Patent Assignee: AT & T CORP (AMTT)

Inventor: COSATTO E; GRAF H P; POTAMIANOS G

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Week Kind Date Applicat No Kind Date US 6118887 Α A 20000912 US 97948750 19971010 200114 B

Priority Applications (No Type Date): US 97948750 A 19971010

Patent Details:

Patent No Kind Lan Pg US 6118887 A 30 Main IPC Filing Notes

A 30 G06K-009/00

Abstract (Basic): US 6118887 A

NOVELTY - The representation models of each feature of a head or a face are generated based on the collected feature data . The complementary representation models are generated for at least one feature. The complementary representation models are compared to generated correlated data. The correlated data are combined into a single representation.

DETAILED DESCRIPTION - Each complementary representation model comprises data reflecting the perceived location of the feature to which it corresponds. The complementary representation models are compared by defining a distance metric for each complementary representation model. The complementary representation models then are positioned adjacent a common interface, and measuring the mutual overlap of the complementary representation models. The information representing areas of correlation between the complementary representation models are collected based on the measured overlap. An INDEPENDENT CLAIM is also included for a method for locating heads and faces in a sequence of frames of images.

USE - For tracking heads, faces, facial features within complex images . Used for e.g. tracking people for surveillance purposes, model -based image compression for video telephony, intelligent computer-user interfaces.

ADVANTAGE - Provides a flexible tracking strategy in the face of diverse camera and lighting conditions and other variables. Enables using both multiple classifiers and multiple types of representations when tracking heads, faces, and facial features. Provides a more robust and accurate tracked output. Selects a tracking strategy based on optimal speed and accuracy of the tracked output.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart representing the tracking method using complementary representation models.

pp; 30 DwgNo 7/9

Title Terms: TRACK; METHOD; TRACK; HEAD; FACE; FACE; FEATURE; COMPLEX; IMAGE; COMPARE; COMPLEMENTARY; REPRESENT; MODEL; GENERATE; CORRELATE; DATA; COMBINATION; SINGLE; REPRESENT

Derwent Class: T01; T04; W02; W04

International Patent Class (Main): G06K-009/00

File Segment: EPI

(Item 11 from file: 350) 29/5/15

DIALOG(R) File 350: Derwent WPIX

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013567300 **Image available** WPI Acc No: 2001-051507/200107

XRPX Acc No: N01-039553

Computer-readable recording medium storing integrated shaping model .

data having models linked by hierarchical structure

Patent Assignee: SEGA ENTERPRISES KK (SEGA-N)

Inventor: ANDO T; SAITO T

Number of Countries: 027 Number of Patents: 003

Patent Family:

Patent No Kind Date Applicat No Kind Date EP 1031946 A2 20000830 EP 2000301217 Α 20000216 200107 B JP 2000242811 A 20000908 JP 9945535 Α 19990223 200107 B1 20020820 US 2000506812 US 6437779 Α 20000218 200257

Priority Applications (No Type Date): JP 9945535 A 19990223

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1031946 A2 E 46 G06T-017/00

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 2000242811 A 39 G06T-017/00

US 6437779 G06T-015/20 В1

Abstract (Basic): EP 1031946 A2

NOVELTY - Model conversion data with an optimum data structure is provided to a drawing library, which is recorded on a medium for games or simulation, and image processing in real-time is carried out.

DETAILED DESCRIPTION - The data of the integrated shaping model includes format data of a common vertex buffer which stores data on the vertices in the models for each model, a vertex list which is created for each model which influences the vertices and has vertex data specified by a vertex ID in the common vertex buffer. A polygon list is created for each model having the polygons, and includes polygon data where the vertex ID is attribute data . INDEPENDENT CLAIMS are included for; an image processing method for converting original model data into integrated shaping model data ; a recording medium storing an image processing program.

USE - Drawing an integrated shaping model which has a number of models linked by a hierarchical structure. At least one model has a number of vertices constituting polygons, and the position of a vertex is influenced by positions of a number of models and weight values from these models.

ADVANTAGE - Integrated shaping models which can implement a natural movement of joints and outer surface of characters can be drawn in real-time.

DESCRIPTION OF DRAWING(S) - The drawing shows a flow chart depicting a procedure of a converter.

pp; 46 DwgNo 14/25

Title Terms: COMPUTER; READ; RECORD; MEDIUM; STORAGE; INTEGRATE; SHAPE; MODEL; DATA; MODEL; LINK; HIERARCHY; STRUCTURE

Derwent Class: T01; W04

International Patent Class (Main): G06T-015/20; G06T-017/00

International Patent Class (Additional): A63F-013/00; G06T-015/00;

G06T-015/70

File Segment: EPI

(Item 12 from file; 29/5/16 35() DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts reserv.

013337510 **Image available** WPI Acc No: 2000-509449/200046

XRPX Acc No: N00-377067

Image area shape estimation system includes model generator which generates area attribute model and activity vector from input image based on area shape information

Patent Assignee: NEC CORP (NIDE ')

Abstract (Basic): EP 595454 A The data channel includes a quantiser for quantising samples of user data read from a track. An adaptive FIR filter, downstream of the quantiser, filters samples baskd on characteristics adaptively developed for a zone containing\ a data track with recorded user data from which samples have been obtained. A Viterbi detector, downstream of the adaptive digital FIR filtar, performs maximum likelihood decoding of the filtered samples.' The filter also filters quantited ser/vo samples during each servo interruption. A servo coefficient programmer programs the FIR filter, in real time, for coefficients for ervo information recorded in sectors during the period of each interruption. ADVANTAGE - High performance and * apacity with reduced size and power consumption. Dwg.4/50 Title Terms: CLASS; RESPOND; MAXIMUM; DATA; CHANNEL; DISC; DRIVE; CONDITION ; DATA; SAMPLE; BASED; SELECT; ADAPT; FIR; DIGITAL; FILTER; COEFFICIENT; VITERBI; DETECT; PRODUCE ; CLASS/ CODE Derwent Class: T01; T03; U22 International Patent Class (Main): G06F-007/38 ; G11B-005/09; G11B-020/10; H04L-001/00; H04L-027/08 International Patent Class (Additional): G06J-001/00; G11B-005/035; G11B-005/596; G11B-020/18; G11B-027/10; H03H-007/30 File Segment: EPI 29/5/19 (Item 15 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2004 Thomson Derwent. All rts. reserv. 009814026 **Image available** WPI Acc No: 1994-093882/199412 XRPX Acc No: N94-073647 Image generation arrangement for computer graphics processing - has processor that receives digital data representing image, with data having at least two different image units, processor links different image units of image for storage in database so different units automatically accessed Patent Assignee: EASTMAN KODAK CO (EAST) Inventor: ELLSON R N Number of Countries: 004 Number of Patents: 004 Patent Family: Patent No Kind Date Applicat No Date Kind Week A1 19940323 EP 93114523 EP 588243 Α 19930909 199412 US 5381526 19950110 US 92943630 Α Α 19920911 199508 EP 93114523 EP 588243 B1 19990203 Α 19930909 199910 DE 69323371 F. 19990318 DE 623371 А 19930909 199917 EP 93114523 Α 19930909 Priority Applications (No Type Date): US 92943630 A 19920911 Cited Patents: 04Jnl.Ref; JP 1005292; JP 4174652; JP 61214692; US 4685068; US 4969204 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes EP 588243 A1 E 8 H04N-001/21 Designated States (Regional): DE FR GB US 5381526 8 G06F-015/62 Α EP 588243 B1 E H04N-001/21 Designated States (Regional): DE FR GB DE 69323371 E

Abstract (Basic): EP 588243 A

The image generation arrangement includes a processor that receives digital data representing an image or scene. The data includes at least image units of the image. Each image unit different contains different data regarding the image, and links the image units of the image for storage in a database such

H04N-001/21 Based on patent EP 588243

that the different image units are automatically accessed when the image or scene accessed.

A storage device stores the different image units of the image in a database. An output device produces an output image from the different image units of the stored scene.

USE/ADVANTAGE - Accesses image data in manner that allows different units of image model data and image data to be accessed for image reproduction, or manipulation of image by graphics processor.

Dwg.1/4

Title Terms: IMAGE; GENERATE; ARRANGE; COMPUTER; GRAPHIC; PROCESS; PROCESSOR; RECEIVE; DIGITAL; DATA; REPRESENT; IMAGE; DATA; TWO; IMAGE; UNIT; PROCESSOR; LINK; IMAGE; UNIT; IMAGE; STORAGE; DATABASE; SO; UNIT; AUTOMATIC; ACCESS

Derwent Class: T01; W02; W04

International Patent Class (Main): G06F-015/62; H04N-001/21

International Patent Class (Additional): G06F-015/401; G06F-017/30

File Segment: EPI

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29/5/20 (Item 16 from file: 350)
DIALOG(R)File 350: Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.
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009345006 **Image available**
WPI Acc No: 1993-038479/199305

XRPX Acc No: N93-029475

Image processing for measuring e.g. skew, typeface characteristics - measuring two sets of locations with characteristic data to required degree of statistical significance and combining to give result data

Patent Assignee: XEROX CORP (XERO)
Inventor: HUTTENLOCHER D P; WAYNER P C
Number of Countries: 005 Number of Patent

Number of Countries: 005 Number of Patents: 006

Patent Family:

Pater	nt No	Kind	Date	App	icat No/	Kind	Date	Week	
EP 52	26197	A2	19930203	EΡ	93306949	Α	19920730	199305	В
EP 52	26197	A3	19940413	EP	9280694/9	Α	19920730	199522	
US 54	116851	Α	19950516	US	91 73 79 6 6	Α	19910730	199525	
EP 52	26197	В1	20000517	ΕP	92306/49	Α	19920730	200028	
DE 69	231049	E ·	20000621	DE	6310/19 ~	Α	19920730	200037	•
				ΕP	923 / 69 \ 49	Α	19920730		
JP 33	346795	· B2	20021118	JP	921/97252	Α	19920723	200279	

Priority Applications (No Type Date): US 91737956 A 19910730 Cited Patents: No-SR.Pub; EP 176010; EP 351701; US 5001766 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 526197 A2 E 24 G06K-00\$/50

Designated States (Regional): DE FR GB

EP 526197 A3 G06K-009/50

US 5416851 A 29 G06K-0 β 9/20

EP 526197 B1 E G06K-009/50

Designated States (Regional): DE FR GB
DE 69231049 E G06K- ϕ 09/50 Based on patent EP 526197

JP 3346795 B2 23 G06T-\$07/60 Previous Publ. Patent JP 5258058

Abstract (Basic): EP 526197 A

The method involves defining an image that includes a first number of locations with an image characteristic relative to each of the locations being measured to a degree of statistical significance (188). In a number of second locations each of which is randomly selected (184) the image data is operated on to obtain respective sample result data (190) each measuring the image characteristic relative to the location.

The respective sample result data of the second locations is combined to obtain image result data (192). The second number is smaller than the first but sufficient to obtain required degree of

008322914 **Image available**
WPI Acc No: 1990-209915/199027

XRPX Acc No: N90-163127

Image generator - relating to computer image generator generates
information in real time from which image can be derived for display
Patent Assignee: THOMSON TRAINING & SIMULATION LTD (THOM-N); BAKER S J
 (BAKE-I); REDIFFUSION SIMULATION LTD (REDI-N); THOMSON TRAINING &
 SIMULATION LTD (CSFC); THOMSON TRAINING & SIMULATION LTD (CSFC)
Inventor: BAKER S J; COWDREY D A; OLIVE G J; WOOD K J; BAKER S; BARKER S J;
 COWDERY D A; OLIVER G J; BAKER J S; WOOD J K
Number of Countries: 034 Number of Patents: 033

Patent Family:

Patent Family:									
	ent No	Kind	Date	App	plicat No	Kind	Date	Week	
WO	9006561	Α	19900614					199027 B	
GB	2226937	Ą	19900711	GB	8927448.	Α	19891205	199028	_
	2004539	A	19900605					199034	
	8946600	A	19900626					199038	
	446293	A	19910918	מת	90900934	А	19891205	199138	
	4502368	พี	19920423		89GB1451	A	19891205	199223	
O F	4302300	VV	13320423					199223	
	0065001	_	10001006		90501112	A	19891205	100010	
GB	2265801	Α	19931006		8927448	A	19891205	199340	
					9311546	Α	19930604		
GB	2265802	А	19931006		8927448	Α	19891205	199340	
					9311547	Α	19930604		
GB	2265803	Α	19931006	GB	8927448	А	19891205	199340	
				GB	9311548	Α	19930604		
GB	2265804	A	19931006	GB	8927448	Α	19891205	199340	
					9311549	A·	19930604		
GB	2226937	В	19940105		8927448	A	19891205	199401	
	2265801	В	19940105		9311546	A	19930604	199401	
	2265802	В	19940105		9311547	A	19930604	199401	
	2265803								
		В	19940105		9311548	A	19930604	199401	
	2265804	В	19940105		9311549	A	19930604	199401	
ΕP	611020	A2	19940817		90900934	A	19891205	199432	
					9420137,6	A	,19891205		-
EP	611021	A2	19940817		90900934	Α	19891205	199432	
					94201377	Α	19891205		
EΡ	611022	A2	19940817	ΕP	90900934	Α	19891205	199432	
				ΕP	94201379	Α	19891205		
ΕP	621548	A2	19941026	ΕP	90900934	Α	19891205	199441	
				ΕP	94201378	Α	19891205		
US	5363475	А	19941108		89GB1451	Α	19891205	199444	
					91689924	A	19910528	100111	
EР	611020	A3	19941221		94201376	A	19891205	199537	
	611022	A3	19941221		94201379	A	19891205	199537	
	621548	A3	19941221		94201378	A	19891205	199537	
	611021	A3	19950614		94201377				
						A	19891205	199610	
LP	446293	В1	19970716		89GB1451	A	19891205	199733	
		_			90900934	Α	19891205		
DE	68928181	E	19970821		628181	A	19891205	199739	
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					90900934	А	19891205		
ΕP	621548	В1	19971015	EΡ	90900934	Α	19891205	199746	
				EΡ	94201378	Α	19891205		
DE	68928391	E,	19971120	DE	628391.	Α	19891205	199801.	
				ΕP	94201378	Α	19891205		
EΡ	611020	В1	19990303		90900934	A	19891205	199913	
					94201376	A	19891205	133310	
EP	611022	В1	19990331		90900934	A	19891205	199917	
	011022	Dī	13330001		94201379	A	19891205	199911	
שת	60020041	E	10000400					100000	
שע	68928941	E	19990408		628941	A	19891205	199920	
n =	60000066	_	10000505		94201376	A	19891205		
DΕ	68928966	E	19990506		628966	Α	19891205	199924	
					94201379	Α.			
KR	166066	В1	19990115	WO	89GB1451	Α	19891205	200038	
				TZ D	00701601	-	1000000		

KR 90701681

Α

19900802

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Priority Applications (No Type Date): GB 8828342 A 19881205; GB 8927448 A
  19891205
Cited Patents: 2.Jnl.Ref; EP 240608; EP 152741; EP 210554; No-SR.Pub
Patent Details:
Patent No Kind Lan Pg
                         Main IPC
                                     Filing Notes
WO 9006561
             А
   Designated States (National): AT AU BB BG BR CH DE DK ES FI GB HU JP KP
   KR LK LU MC MG MW NL NO RO SD SE SU TD US
   Designated States (Regional): BE FR IT OA
EP 446293
   Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE
JP 4502368
              W
                       G09B-009/30
                                     Based on patent WO 9006561
GB 2265801 ... A ... 84, G06F-015/72.
                                    Derived from application GB 8927448
GB 2265802
                    80 G06F-015/72
              Α
                                     Derived from application GB 8927448
GB 2265803
                    81 G06F-015/72
                                     Derived from application GB 8927448
              Α
GB 2265804
              Α.
                    81 G06F-015/72
                                     Derived from application GB 8927448
GB 2226937
                     3 G06F-015/72
              В
GB 2265801
                       G06F-015/72
              В
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EP 611020
              A2 E 52 G06F-015/72
                                     Related to application EP 90900934
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
EP 611021
              A2 E 53 G06F-015/72
                                     Related to application EP 90900934
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
EP 611022
              A2 E 52 G06F-015/72
                                     Related to application EP 90900934
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
              A2 E 53 G06F-015/72
EP 621548
                                     Related to application EP 90900934
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
US 5363475 ... A;
                 47 G06F-015/72. Based on patent WO 9006561
EP 611020
              А3
                                     Related to patent EP 446293
EP 611022
              A3
                                     Related to patent EP 446293
EP 621548
              A3
                                     Related to patent EP 446293
EP 611021
              A3
                                     Related to patent EP 446293
EP 446293
              B1 E 65 G06T-015/00
                                     Based on patent WO 9006561
   Designated States (Regional): AT BE CH DE ES FR GB IT LI LU NL SE
DE 68928181
                       G06T-015/00
                                     Based on patent EP 446293
                                     Based on patent WO 9006561
EP 621548
              B1 E 49 G06T-015/00
                                     Div ex application EP 90900934
                                     Div ex patent EP 446293
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
DE 68928391
              Ε
                       G06T-015/00
                                     Based on patent EP 621548
EP 611020
            . B1 E
                       G06T-001/00
                                     Div ex application EP 90900934
                                     Div ex patent EP 446293
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
EP 611022
              B1 E
                       G06T-001/00
                                     Div ex application EP 90900934
                                     Div ex patent EP 446293
   Designated States (Regional): AT BE CH DE ES FR IT LI LU NL SE
DE 68928941
              E
                       G06T-001/00
                                     Based on patent EP 611020
DE 68928966.
              Ε.
                       G06T-001/00.
                                     Based on patent EP 611022
KR 166066
              В1
                       G06T-015/00
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Abstract (Basic): WO 9006561 A

The appts. generates an image to be displayed on a screen from data defining a model ,including a plurity of opaque and translucent features. The image represents a view of the model from a predetermined eyepoint and is made up from an array of screen space pixels to be displayed by a raster scanning process. Each pixel is of uniform colour and intensity and the pixels together define an image area.

The image area is divided into an array of sub-areas, each of which covers at least one pixel. The distance of a feature from the eyepoint can be determined. Feature describing data can be stored.

USE - Flight simulator.

Dwg.2/32

Title Terms: IMAGE; GENERATOR; RELATED; COMPUTER; IMAGE; GENERATOR;

GENERATE ; INFORMATION; REAL; TIME; IMAGE; CAN; DERIVATIVE; DISPLAY

Derwent Class: P85; T01; W06

International Patent Class (Main): G06F-015/72; G06T-001/00; G06T-015/00;

G09B-009/30

International Patent Class (Additional): G06F-015/62

File Segment: EPI; EngPI

29/5/23 (Item 19 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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007638224 **Image available** . . .

WPI Acc No: 1988-272156/198839

XRPX Acc No: N88-206729

Raster scan display system with RAM character generator - uses dual-port DRAM system as video buffer addressed by CPU

A CARLON AND A

В

Patent Assignee: IBM CORP (IBMC)

Inventor: PARSONS D H; TRYNOSKY S W; DONALD H P J; STEPHEN W T

Number of Countries: 016 Number of Patents: 013

Patent Family:

Patent No		Kind	Date	App	olicat No	Kind	Date	Week
EP 28	3579	Α	19880928	ΕP	87118541	Α	19871215	198839
GB 22	02720	A	19880928	GB	8728926	Α	19871210	198839
DE 38	10232	Α	19881013	.DE	3810232	Α	19880325	198842
FR 26	13109	A	19880930					198846
BR 88	01301	A	19881025					198848
BE 10	01069	Α	19890627	BE	88800017	Α	19880808	198927
CN 88	00280	Α	19881019					198939
DE 38	10232	С	19910131					199105
GB 22	02720	В	19910417					199116
IT 12	17360	В	19900322					199208
EP 28	3579	В.	19920325	EΡ	87118541	Α	19871215	199213
DE 37	77810	G	19920430					199219
KR 95	08023	В1	19950724	KR	882039	Α	19880227	199717

Priority Applications (No Type Date): US 8730787 A 19870327 Cited Patents: 2.Jnl.Ref; A3...8923; EP 134423; No-SR.Pub; US 4595996 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 283579 A E 13

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE EP 283579 B 16

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE KR 9508023 B1 G06F-003/153

Abstract (Basic): EP 283579 A

The raster scan display system uses the RAM character generator (10) and a dual port video buffer random access memory (20). The dual port buffer has a shift register output for holding a row of data from the random access memory. The buffer has two partitions, one containing, at consecutive locations, character data and attribute data, the other, character data and front data.

In a first mode of operation using the first partition, data transferred to the shift register comprises character data to address the character generator store and attribute data from combination with front data retrieved from the character generator store to provide video data. In a second mode, using the second partition, character and font data transferred to the shift is used to address and update the character generator store.

USE/ADVANTAGE - To generate alphanumeric characters or graphic displays. Few components. Multiplexers and transceivers are not used. Title Terms: RASTER; SCAN; DISPLAY; SYSTEM; RAM; CHARACTER; GENERATOR; DUAL; PORT; DRAM; SYSTEM; VIDEO; BUFFER; ADDRESS; CPU
Derwent Class: P85; T04

International Patent Class (Main): G06F-003/153

International Patent Class (Additional): G06F-003/15; G06F-013/20;
G06K-000/00; G09G-001/16; G09G-005/22

File Segment: EPI; EngPI

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S2
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S3
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S4
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S5
      546588 MODALITY OR MODALITIES OR MODE? OR MODAL?
      1534396 VISUAL? OR IMAGE? OR PICTUR? OR PICTORIAL? OR GRAPHIC?
S6
s7
      2019244 TEXTUAL OR TEXT? ? OR DATA
      1451642 COMBIN? OR UNIFIED OR UNIFYING OR CONSOLIDAT? OR MERGE? OR
S8
            JOIN? OR MERGING OR UNITE?
s9
      3931886 CREATE? OR GENERATE? OR PRODUCE? OR DEVELOP? ? OR ORIGINAT-
            E? OR MAKE?
      4315541 FEATURE? OR CHARACTERISTIC? OR TRAIT? OR DESCRIPTION? OR A-
S10
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      4975378 VECTOR? OR COORDINATES OR PATH? OR LOCAT? OR ADDRESS? OR P-
S11
            LACE? OR POSITION? OR LOCAL?
S12
      4442970 CONCATENAT? OR CONNECT? OR LINK? POR COMBINE? OR RELATE? -
            OR RELATING OR MATCH?
S13
       157424
               S1 (3W) S2
S14
       12345
               S4 (3W)S5
       27934 S4 (3N) S6
S15
       19014 S5 (3N) S6
S16
       28569 S5 (3N) S7
35525 S6 (3N) S10
S17
S18
S19
       36431 S7 (3N) S10
S20
       9340 S18 AND S11
        9486 S19 AND S11
S21
        13 S8 AND S9 AND S20 AND S16
S22
S23
          23 S8 AND S9 AND S21 AND S17
S24
               S12 AND (S1 (3N) S20) AND (S1 (3N) S21) AND (S8 (3N) S10 (-
           3N) S11)
S25
           6 S13 AND S14 AND S15 AND S16 AND S17
S26
          41 S22 OR S23 OR S24 OR S25
         18 S26 AND IC=(G06F? OR G06E? OF G06G?)
S27
S28
          9 S26 AND MC=(T01-J04C OR T01-J10B2 OR T01-S03)
         23 S27 OR S28
S29
         291 S13 AND S14
S30
                                             4 4 5 5 5 5 5 7
S31
         88 S14 AND S16 AND S17
S32
         15 S30 AND S31
S33
          9 S32 NOT S26
S34
           2 S33 AND IC=(G06F? OR G06E? OF G06G?)
S35
           1 S33 AND MC=(T01-J04C OR T01-J10B2 OR T01-S03)
S36
              S34 OR S35
File 347: JAPIO Nov 1976-2004/Jun (Updated 041004)
         (c) 2004 JPO & JAPIO
File 350: Derwent WPIX 1963-2004/UD, UM &UP=200470
         (c) 2004 Thomson Derwent
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(Item 1 from file: 350)
36/5/1
DIALOG(R) File 350: Derwent WPIX
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014622460 **Image available**

WPI Acc No: 2002-443164/200247 XRPX Acc No: N02-349105

Image data converter for color printer, outputs image data indicating existence of point or area having color value more than predetermined value and image data independent of indication in different modes

Patent Assignee: FUJI PHOTO FILM CO LTD (FUJF)

Inventor: KINOSHITA Y

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date 20011001 200247 B US 20020039191 A1 20020404 US 2001965851 Α 20020412 JP 2000299163 20000929 200247 JP 2002111993 A А

Priority Applications (No Type Date): JP 2000299163 A 20000929 Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

16 G06F-015/00 US 20020039191 A1

JP 2002111993 A 10 H04N-001/38

Abstract (Basic): US 20020039191 A1

NOVELTY - A detection section detects the existence of a point or an area in an image in which the color value exceeds a predetermined value. A conversion section operated in two modes , outputs the data independent of the point or the area detected by the detection section in one mode. In other mode, the existence of the point or the area detected by the detection section is indicated on the output image.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Recorded medium storing image data conversion program;
- (b) Recorded medium storing image data reconversion program

USE - Used for converting input color image data in color printer.

ADVANTAGE - In the case of a masked image, the production of a proof image in accordance with the image data converted in the second mode, enables to easily confirm if the masked portion of the image is erased.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic constitution view of a print and proof image creating system.

pp; 16 DwgNo 1/13

Title Terms: IMAGE; DATA; CONVERTER; COLOUR; PRINT; OUTPUT; IMAGE; DATA; INDICATE; EXIST; POINT; AREA; COLOUR; VALUE; MORE; PREDETERMINED; VALUE; IMAGE; DATA; INDEPENDENT; INDICATE; MODE

Derwent Class: P75; S06; T01; T04

International Patent Class (Main): G06F-015/00; H04N-001/38 International Patent Class (Additional): B41J-029/00; B41J-029/46; G06K-001/00; G06T-001/00; H04N-001/46; H04N-001/60 File Segment: EPI; EngPI

36/5/2 (Item 2 from file: 350) DIALOG(R) File 350: Derwent WPIX

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011915558 **Image available** WPI Acc No: 1998-332468/199829

XRPX Acc No: N98-259488

Graphical programming system in software development learning process displays textual computer program listing which assists user to learn computer programming by exposing user to program commands of text based programming language corresponding to graphic programs

Patent Assignee: MICROSOFT CORP (MICR-N)

Inventor: CHAININI D S; YAMADA E M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week
US 5760788 A 19980602 US 95508746 A 19950728 199829 B

Priority Applications (No Type Date): US 95508746 A 19950728 Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 5760788 A 24 G06F-009/00

Abstract (Basic): US 5760788 A

The system includes a computer provided with an input device and a display device. The input device is used for selecting and entering instructions that control graphic programming. Graphic programming components are displayed on a display screen of the display device.

Multiple graphic objects are displayed on the display screen. The user selects the specific graphic object for inclusion in the graphical program. Multiple actions are displayed on the screen. One action which represents a graphic icon, enables user to select a specific action associated with the user selected graphic object. A user defined sequence of graphic program steps of the graphical programs, which include text and graphic object is created and displayed by performance of selected action by selected graphic object. A mode selection part selects one among multiple different modes.

A portion of a textual computer program listing, corresponding to a portion of the graphical program is displayed based on set **mode**. A **text** translated to program commands in the textual computer program listing is entered for modifying the graphical program based on the plain **text** mode. The external computer programs listing assists the user to learn computer programming by exposing to user program commands of a text based programming language corresponding to the graphic program steps.

ADVANTAGE - Enables rapid development of proficiency in programming with VBA text based code. Enables more easy understanding of text based programming language.

Dwg.11/16

Title Terms: GRAPHICAL; PROGRAM; SYSTEM; SOFTWARE; DEVELOP; LEARNING; PROCESS; DISPLAY; TEXT; COMPUTER; PROGRAM; LIST; ASSIST; USER; LEARNING; COMPUTER; PROGRAM; EXPOSE; USER; PROGRAM; COMMAND; TEXT; BASED; PROGRAM; LANGUAGE; CORRESPOND; GRAPHIC; PROGRAM

Derwent Class: T01

International Patent Class (Main): G06F-009/00

File Segment: EPI

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        19622
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             ISUAL? OR IMAGE? OR GRAPHIC?
S3
                TWO OR DUPLICATE OR MULTIPLE OR MANY OR PLURAL? OR NUMEROUS
              OR SEVERAL
S4
              DISPARATE OR DIFFERENT OR DISSIMILAR OR DIVERGENT OR DIVER-
             SE OR UNLIKE OR VARIANT OR VARIOUS
S5
         9591 MODALITY OR MODALITIES OR MODE? OR MODAL?
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S10
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S12
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             OR RELATING OR MATCH?
         1302
               S1 (3W) S2
S13
               S4 (3W) S5
S14
          118
S15
          150
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S16
          694 S5 (3N) S6
         863 S5 (3N) S7
S17
S18
         784 S6 (3N) S10
         1388 S7 (3N) S10
S19
        244 S18 AND S11
S20
          378 S19 AND S11
S21
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S23
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             3N) S11)
S25
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S26
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                S37 NOT PD>200105100
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File 256:TecInfoSource 82-2004/Jul
         (c) 2004 Info. Sources Inc
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38/5/13

DIALOG(R) File 256:TecInfoSource (c) 2004 Info.Sources Inc. All rts. reserv.

00130129

DOCUMENT TYPE: Review

PRODUCT NAMES: Portals (840564)

TITLE: Representing knowledge in enterprise portals

AUTHOR: Adams, Katherine C

SOURCE: KM World, v10 n5 p18(3) May 2001

ISSN: 1060-894X

HOMEPAGE: http://www.KMonline.com

RECORD TYPE: Review

REVIEW TYPE: Product Analysis GRADE: Product Analysis, No Rating

A discussion of knowledge representation in enterprise portals focuses on automated classifiers and animated taxonomies that assist companies in organizing information. Topics discussed include the characteristics of digital environments, directories and information access, animated taxonomies, benefits and applications, and information structures, which are critical to effective portal design and use. The two types of knowledge organization products are automatic classification technology and data visualization tools. The former creates Yahoo!-type directories, while animated taxonomies from Inxight, The Brain, and ThinkMap graphically show large amounts of data. Animated trees or Web structures are shown in a visually remarkable interface with wireframe graphics that link a category to all subcategories. Both types seek to ease information access, but use different methods to do so. For instance, animated taxonomies do not significantly reorder content, while Yahoo!-like directories 'physically catalog documents in an enterprise portal' using parent/child relationships. An excellent example of an online directory is Bitpipe, which is a syndicator of IT information that allows users to jump from one related concept to another within, for instance, the category Databases. Visualization tools graphically link similar types of content, irrespective of the location of that content. Advantages of automated classification tools and animated taxonomies for content management, brainstorming, problem solving, aesthetics, improved communication, and collaboration are discussed.

COMPANY NAME: Vendor Independent (999999)

DESCRIPTORS: Indexing; Knowledge Management; Natural Languages; Portals;

Taxonomies

REVISION DATE: 20020430

38/5/17

DIALOG(R) File 256: TecInfoSource (c) 2004 Info. Sources Inc. All rts. reserv.

00119533 DOCUMENT TYPE: Review

PRODUCT NAMES: Shared Vision (777226)

TITLE: Broadband Enterprise Medical Image Sharing: Real-Time Consult

with...

AUTHOR: Hindus, Leonard A

SOURCE: Advanced Imaging, v14 n7 p34(2) Jul 1999

ISSN: 1042-0711

HOMEPAGE: http://www.advancedimagingmag.com

RECORD TYPE: Review

REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

ImageLabs's Shared Vision is a system in which images are transmitted over a T1 line to a Shared Vision workstation so doctors can review images and other patient information simultaneously and participate in a real-time consult. Another feature of the Shared Vision system is that the workstations can simultaneously display images from different modalities; in other words, X-Ray, ultrasound, nuclear medicine CAT scans, MRIs and PET scans can be displayed at the same time with the system synchronizing the images. The DICOM format that most electronic medical images use provides for several hundred attribute fields in the record header, and this header contains information about the patient, the diagnostic series, and even the image itself. DICOM does not standardize the header and ImageLabs uses the DICOM Conformance Statement required of each vendor to map DICOM images in a standard DICOM format. This lets the Shared Vision system display and synchronize multiple images from multiple modalities and multiple vendors at the same time.

COMPANY NAME: ImageLabs Inc (670278)

SPECIAL FEATURE: Screen Layouts

DESCRIPTORS: Communications Standards; Health Care; Medical Diagnosis;

Patient Care; Real Time Data Acquisition; Telecommunications;

Telemedicine

REVISION DATE: 20000430

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Description
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S19
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S23
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            N) S11)
S25
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S26
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         (c) 2004 Elsevier Eng. Info. Inc.
      35:Dissertation Abs Online 1861-2004/Oct
         (c) 2004 ProQuest Info&Learning
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         (c) 2004 EBSCO Publishing
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       2:INSPEC 1969-2004/Oct W4
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         (c) 2003 EBSCO Pub.
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         (c)2004 Japan Science and Tech Corp(JST)
      99:Wilson Appl. Sci & Tech Abs 1983-2004/Sep
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      95:TEME-Technology & Management 1989-2004/Jun W1
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741 (Optics & Optical Devices); 723 (Computer Software); 921 (Applied
 Mathematics)
   74 (OPTICAL TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING); 92
 (ENGINEERING MATHEMATICS)
            (Item 5 from file: 8)
  34/5/5
 DIALOG(R) File 8:Ei Compendex(R)
 (c) 2004 Elsevier Eng.
                         Info. Inc. All rts. reserv.
 04370681 E.I. No: EIP960 3116557
     Title: Bayes risk weighted vector quantization with posterior
 estimation for image compression and classification
   Author: Perlmutter, Keren O.; Perlmutter, Sharon M.; Gray, Robert M.;
 Olshen, Richard A.; Oehler, Karen L.
   Corporate Source: Stanford Univ, Stanford, CA, VSA
   Source: IEEE Transactions on \text{Image Processing } \neq 5 n 2 Feb 1996. p 347-360
   Publication Year: 1996
   CODEN: IIPRE4
                   ISSN: 1057-7149
   Language: English
   Document Type: JA; (Journal Article)
                                           Treatment: A; (Applications); T;
(Theoretical)
   Journal Announcement: 9605W4
   Abstract: Classification and compression play important roles in
 communicating digital information. Their combination is useful in many applications, including the detection of abnormalities in compressed
 medical images. In view of the similar ties of compression and low-level
 classification, it is not surprising th there are many similar methods
 for their design. Because some of these hethods are useful for designing
 vector quantizers, it seems natural that \vector quantization (VQ) is
 explored for the combined goal. Whe investigate several VQ-based
 algorithms that seek to minimize both the dastortion of compressed images
 and errors in classifying their pixel blocks \ These algorithms are
 investigated with both full search and tree-structured codes. We emphasize
 a nonparametric technique that minimizes both error measures simultaneously
 by incorporating a Bayes risk/component into the distortion measure used
 for design and encoding. We introduce a tree-structured posterior estimator
 to produce the class posterior probabilities required for the Bayes risk computation in this design for two different image sources, we
 demonstrate that this system provides superior classification while
 maintaining compression close or superior to that of\several other VQ-based
 designs, including Kohonen's 'learning vector quant\zer' and a sequential
 quantizer/classifier design. (Author abstract) 49 Refs
   Descriptors: Vector quantization; Image compression; Image processing;
 Parameter estimation; Algorithms; Errors; Codes (symbols); Image coding;
 Probability; Calculations
   Identifiers: Bayes risk weighted vector quantization; Image
 classification; Posterior estimation; Vector quantization based
 algorithms; Bayes risk
   Classification Codes:
   723.2 (Data Processing); 922.1 (Probability Theory)
   723 (Computer Software); 922 (Statistical Methods)
   72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)
  34/5/6
            (Item 6 from file: 8)
 DIALOG(R)File 8:Ei Compendex(R)
 (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
          E.I. No: EIP95052707460
 04164511
    Title: Segmentation of range images as the search for geometric
 parametric models
   Author: Leonardis, Ales; Gupta, Alok; Bajcsy, Ruzena
   Corporate Source: Univ of Pennsylvania, Philadelphia, PA, USA
   Source: International Journal of Computer Vision v 14 n 3 Apr 1995. p
```

253-277

Publication Year: 1995

CODEN: IJCVEC ISSN: 0920-5691

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 9507W3

Abstract: Segmentation of range images has long been considered in computer vision as an important but extremely difficult problem. In this paper we present a new paradigm for the segmentation of range images into piecewise continuous surfaces. Data aggregation is performed via model recovery in terms of variable-order bi-variate polynomials using iterative regression. Model recovery is initiated independently in regularly placed seed regions in the image . All the recovered models are potential candidates for the final description of the data . Selection of the models is defined as a quadratic Boolean problem, and the solution is sought by the WTA (winner-takes-all) technique, which turns out to be a good compromise between the speed of computation and the accuracy of the solution. The overall efficiency of the method is achieved by combining model recovery and model selection in an iterative way. Partial recovery of the models is followed by the selection (optimization) procedure and only the ?best' models are allowed to develop further. The major novelty of the approach lies in an effective combination of simple component algorithms, which stands in contrast to methods which attempt to solve the problem in a single processing step using sophisticated means. We present the results on several real range images. (Author abstract) Refs.

Descriptors: Computer vision; Image segmentation; Mathematical models; Polynomials; Iterative methods; Regression analysis; Boolean algebra; Computational methods; Optimization; Algorithms

Identifiers: Geometric parametric models; Range images; Data aggregation; Winner takes all (WTA) technique; Model recovery; Model selection

Classification Codes:

741.2 (Vision); 723.5 (Computer Applications); 723.2 (Data Processing); 921.6 (Numerical Methods); 921.1 (Algebra); 922.2 (Mathematical Statistics)

741 (Optics & Optical Devices); 723 (Computer Software); 921 (Applied Mathematics); 922 (Statistical Methods)

74 (OPTICAL TECHNOLOGY); 72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

34/5/9 (Item 9 from file: 8) DIALOG(R)File 8:Ei Compendex(R)

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03939551 E.I. No: EIP94091397503

Title: Tool for hypertext-based systems analysis and dynamic evaluation Author: He, JingXiang; Griggs, Kenneth A.

Corporate Source: Univ of Hawaii, Honolulu, HI, USA

Conference Title: Proceedings of the 27th Hawaii International Conference on System Sciences (HICSS-27). Part 3 (of 5)

Conference Location: Wailea, HI, USA Conference Date: 19940104-19940107 Sponsor: University of Hawaii; University of Hawaii College of Business Administration; IEEE Computer Society; Association for Computing Machinery E.I. Conference No.: 20790

Source: Proceedings of the Hawaii International Conference on System Sciences v 3 1994. Publ by IEEE, Computer Society Press, Los Alamitos, CA, USA, 94TH0607-2. p 5-14

Publication Year: 1994

CODEN: PHISD7 ISSN: 1060-3425 ISBN: 0-8186-5070-2

Language: English

Document Type: CA; (Conference Article) Treatment: G; (General Review); T; (Theoretical)

4-14-5-6-6

Journal Announcement: 9410W4

Abstract: This paper proposes a tool for systems analysis that incorporates hypertext, simulation and expert system techniques. The tool, Hyper Analysis Toolkit (HAT), provides a hypertext linkage of **graphical** models, such as DFDs (Data Flow Diagrams) and ERDs (Entity Relation Diagrams) with system description narratives and other documents **created**

during the early stages of systems analysis. Hyperlinks **placed** in diagrams and documents provide an easy way for users and system analysts to navigate and cross-reference systems models. The tool also includes a simulation package and a rule-based expert system to evaluate models statistically and dynamically. Extensive evaluations of models will give estimates of the system dynamics at the early stages of the systems development life cycle. (Author abstract) 20 Refs.

Descriptors: Computer aided software engineering; Systems analysis; Information services; Graphic methods; Data description; Data reduction; Statistical methods; Information retrieval systems; Data structures; Computer simulation

Identifiers: Hypertext based systems; Hyper analysis toolkit; Data flow diagrams; Entity relation diagrams; Joint application design; Rapid application development; Prototyping; Hyperlinks

Classification Codes:

723.5 (Computer Applications); 921.6 (Numerical Methods); 903.4 (Information Services); 723.2 (Data Processing); 723.1 (Computer Programming); 903.3 (Information Retrieval & Use)

723 (Computer Software); 921 (Applied Mathematics); 903 (Information Science)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS); 90 (GENERAL ENGINEERING)

34/5/13 (Item 13 from file: 8)

DÍALOG(R) File 8:Ei Compendex(R)

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03546231 E.I. Monthly No: EIM9301-002231

Title: Feature selection for neural network recognition.

Author: Adachi, Toshio; Furuya, Riki; Greene, Spencer; Mikuriya, Kenta Conference Title: 1991 IEEE International Joint Conference on Neural Networks - IJCNN '91

Conference Location: Singapore, Singapore Conference Date: 19911118 Sponsor: IEEE Neural Network Council; Int Neural Network Soc E.I. Conference No.: 17262

Source: 91 IEEE Int Jt Conf Neural Networks IJCNN 91. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA (IEEE cat n 92CH3065-0). p 696-701 Publication Year: 1992

ISBN: 0-7803-0227-3

Language: English

Document Type: PA; (Conference Paper) Treatment: A; (Applications); T; (Theoretical); X; (Experimental)

Journal Announcement: 9301

Abstract: The authors present a system designed to help in the development of image recognition applications, using a general neural-network classifier and an algorithm for selecting effective image features given a small number of samples. Input to the system consists of a number of primitive image features computed directly from pixel values. The feature selection subsystem generates an image recognition feature vector by operations on the primitive features. It uses a combination of rule-based techniques and statistical heuristics to select the best features. The authors propose a quality statistic function which is based on sample values for each primitive feature. The parameters of this function were decided, and the authors experimented on several different target image groups using this function. Recognition rates were perfect in each case. 5 Refs.

Descriptors: *NEURAL NETWORKS; PATTERN RECOGNITION; ALGORITHMS; THEORY; STATISTICAL METHODS

Identifiers: PATTERN CLASSIFICATION; FEATURE SELECTION; IMAGE RECOGNITION; RULE BASED TECHNIQUES; STATISTICAL HEURISTICS; QUALITY STATISTIC FUNCTION

Classification Codes:

723 (Computer Software); 922 (Statistical Methods)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

34/5/16 (Item 16 from file: 8) DIALOG(R) File 8:Ei Compendex(R)

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02221576 E.I. Monthly No: EIM8701-002147

Title: DETERMINING THE POSE OF AN OBJECT.

Author: Dolezal, R. M.; Mudge, T. N.; Turney, J. L.; Volz, R. A.

Corporate Source: Univ of Michigan, Ann Arbor, MI, USA

Conference Title: Computer Vision for Robots. (2nd International Technical Symposium on Optical and Electro Optical Applied Science and Engineering.)

Conference Location: Cannes, Fr Conference Date: 19851202

Sponsor: SPIE, Bellingham, WA, USA; Assoc Natl de la Recherche Technique, Paris, Fr

E.I. Conference No.: 08803

Source: Proceedings of SPIE - The International Society for Optical Engineering v 595. Publ by SPIE, Bellingham, WA, USA p 68-71

Publication Year: 1985

CODEN: PSISDG ISSN: 0277-786X ISBN: 0-89252-630-0

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8701

Abstract: We present an algorithm for determining the **position** and orientation (pose) of an unoccluded three-dimensional object given a digitized grey-scale **image**. A **model data** base of **characteristic** views is **generated** prior to run-time by **merging** perspective views containing the same feature points, such as points of sharp curvature in an edge map, into common characteristic views. The run-time algorithm consists of (1) extracting an edge map from the image; (2) **locating** feature points in the edge map; (3) using intrinsic properties of the feature points in the image, such as signs of curvature, to rank the characteristic views for the object according to their likelihood of correspondence to the image; (4) for each characteristic view in the ranking, matching properties of the image feature points and object feature points in order to **generate** potential correspondences; and (5) verifying the most likely correspondences by examining a least-squares fit in each correspondence. The fit yields a rotation matrix that defines the pose of the object. (Author abstract) 6 refs.

Descriptors: *COMPUTER PROGRAMMING--*Algorithms; ROBOTS, INDUSTRIAL--Vision Systems; PATTERN RECOGNITION SYSTEMS

Identifiers: DETERMINING THE POSE OF AN OBJECT; OFF-LINE DATA BASE GENERATION; UNCLOUDED THREE-DIMENSIONAL OBJECT; EXTRACTION OF EDGE MAP FROM IMAGE; LOCATION OF FEATURE POINTS; VERIFYING MOST LIKELY CORRESPONDENCES Classification Codes:

723 (Computer Software); 741 (Optics & Optical Devices)

72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

34/5/19 (Item 3 from file: 35) DIALOG(R) File 35: Dissertation Abs Online

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01797985 ORDER NO: AADAA-19936101

DESIGN RECOVERY AND DATA MINING: A METHODOLOGY THAT IDENTIFIES DATA COHESIVE SUBSYSTEMS BASED ON MINING ASSOCIATION RULES

Author: MONTES DE OCA, CARLOS

Degree: PH.D. Year: 1999

Corporate Source/Institution: THE LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COL. (0107)

Director: DORIS L. CARVER

Source: VOLUME 60/06-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 2788. 168 PAGES

Descriptors: COMPUTER SCIENCE

Descriptor Codes: 0984

Software maintenance is both a technical and an economic concern for

organizations. Large software systems are difficult to maintain due to their intrinsic complexity, and their maintenance consumes between 50% and 90% of the cost of their complete life-cycle. An essential step in maintenance is reverse engineering, which focuses on understanding the system. This system understanding is critical to avoid the generation of undesired side effects during maintenance. The objective of this research is to investigate the potential of applying data mining to reverse engineering. This research was motivated by the following: (1) data mining can process large volumes of information, (2) data mining can elicit meaningful information without previous knowledge of the domain, (3) data mining can extract novel non-trivial relationships from a data set, and (4) data mining is automatable. These data mining features are used to help address the problem of understanding large legacy systems.

This research **produced** a general method to apply data mining to reverse engineering, and a methodology for design recovery, called Identification of Subsystems based on Associations (ISA). ISA uses mined association rules from a database view of the subject system to guide a clustering process that **produces** a data-cohesive hierarchical subsystem decomposition of the system. ISA promotes object-oriented principles because each identified subsystem consists of a set of data repositories and the code (i.e., programs) that manipulates them. ISA is an automatic multi-step process, which uses the source code of the subject system and multiple parameters as its input. ISA includes two representation models (i.e., text-based and **graphic** -based representation **models**) to present the resulting subsystem decomposition.

The automated environment RE-ISA implements the ISA methodology. RE-ISA was used to **produce** the subsystem decomposition of real-word software systems. Results show that ISA can automatically **produce** data-cohesive subsystem decompositions without previous knowledge of the subject system, and that ISA always **generates** the same results if the same parameters are utilized.

This research provides evidence that data mining is a beneficial tool for reverse engineering and provides the foundation for defining methodologies that **combine** data mining and software maintenance.

34/5/20 (Item 4 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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01768390 ORDER NO: AADAA-19988122

Video content analysis: Scene segmentation and classification

Author: Huang, Jincheng

Degree: Ph.D. Year: 2000

Corporate Source/Institution: Polytechnic University (0179)

Adviser: Yao Wang

Source: VOLUME 61/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL:

PAGE 4881. 101 PAGES

Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL

Descriptor Codes: 0544
ISBN: 0-599-95006-4

Along with the advancement in multimedia, a huge amount of digital data, including TV programs, conferences, and movies, are generated daily. Tools that can automatically parse video sequences into semantically coherent units and automatically label each segment based on its semantic content are becoming indispensable for efficient video indexing and retrieval. Most of the work on video content analysis is based on visual information, such as color histogram, motion distribution, edge features, etc. In this thesis, we focus on the use of both audio and visual information for video segmentation and scene classification.

We propose a hierarchical video segmentation algorithm to detect scene and shot breaks by using audio-visual information. The algorithm first detects significant changes in audio, color, and motion, separately. The scene and shot breaks are determined according to the coincidence of

changes of audio, color, and motion. In this way, videos can be presented or summarized in a hierarchical manner.

The results obtained from rule-based classification approaches depend on the scene definition and the appropriateness of the rules. In this thesis, we investigate the classification of video segments into one of predefined scene categories and explore the use of a Hidden Markov Model (HMM), which is driven by training data. We have found that audio or visual features alone can be quite effective in separating these five classes. The average accuracy can reach as high as 82 percent.

Different modalities present in a video sequence complement each other. Proper integration of multimodal features can resolve the ambiguities in individual modalities. We investigated four integration methods for scene classification based on HMM. These include direct concatenation, multi-stage, product, and neural-net methods. All four approaches can improve the classification accuracy over that achievable based on single-modality features. The best method can achieve an average accuracy of over 90 percent.

Thresholding algorithms for segmentation can lead to spurious breaks when a scene contains different segments that have different audiovisual characteristics. Another difficulty is how to select proper thresholds. To circumvent these problems, we describe two approaches for joint video classification and segmentation based on HMM. These methods search optimal class transition paths by dynamic programming, thus yielding scene segmentation and classification results simultaneously.

34/5/22 (Item 6 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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01613341 ORDER NO: NOT AVAILABLE FROM UNIVERSITY MICROFILMS INT'L.
KNOWLEDGE-BASED MEDICAL IMAGE UNDERSTANDING (IMAGE UNDERSTANDING, OBJECT RECOGNITION)

Author: BROWN, MATTHEW SHERMAN

Degree: PH.D. Year: 1997

Corporate Source/Institution: UNIVERSITY OF NEW SOUTH WALES (AUSTRALIA) (0423)

Source: VOLUME 58/10-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 5477.

Descriptors: COMPUTER SCIENCE

Descriptor Codes: 0984

Medical image analysis is a complex task in which a human expert makes extensive use of knowledge of anatomy and imaging techniques. We present a knowledge-based approach to interpreting medical images.

A system has been designed which demonstrates the following principles.

An explicit, high-level anatomical model can be used to interpret medical images by mapping image and model data to a common feature -space domain for comparison, matching and analysis.

The mapping to feature space allows the model and image data representations to be independent. Thus a modular architecture can be designed, in which high-level knowledge and conventional image segmentation techniques interact systematically.

Anatomical variability, including pathological changes. can be modelled intuitively by representing the uncertainty/vagueness associated with the concepts of "normal" and "abnormal" for individual features. This allows quantification of uncertainty during image interpretation, and natural, symbolic descriptions of recognised image structures.

Anatomical relationships between organs can provide a naturally hierarchical approach to inferencing and control, allowing refinement of a priori (model-derived) constraints, based on a posteriori (image-derived) information.

Object recognition, in our case, involves matching segmented image structures to modelled anatomy, and anatomical knowledge is used to guide both low-level segmentation and subsequent matching. The system has three

Document Number: S0740-3232(97)00908-3

Language: English Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: The discrimination power of various human facial features is studied and a new scheme for automatic face recognition (AFR) is proposed. The first part of the paper focuses on the linear discriminant analysis (LDA) of different aspects of human faces in the spatial as well as in the wavelet domain. This analysis allows objective evaluation of the significance of visual information in different parts (features) of the face for identifying the human subject. The LDA of faces also provides us with a small set of features that carry the most relevant information for classification purposes. The features are obtained through eigenvector analysis of scatter matrices with the objective of maximizing between-class variations and minimizing within-class variations. The result is an efficient projection-based feature-extraction and classification scheme for AFR. Each projection creates a decision axis with a certain level of discrimination power or reliability. Soft decisions made based on each of the projections are combined, and probabilistic or evidential approaches to multisource data analysis are used to provide more reliable recognition results. For a medium-sized database of human faces, excellent classification accuracy is achieved with the use of very-low-dimensional feature vectors. Moreover, the method used is general and is applicable to many other image -recognition tasks. (38 Refs)

Subfile: A B C

Descriptors: eigenvalues and eigenfunctions; face recognition; feature extraction; image classification; wavelet transforms

Identifiers: decision axis; human face images; discrimination power; human facial features; automatic face recognition; linear discriminant analysis; wavelet domain; visual information; eigenvector analysis; scatter matrices; between-class variations; within-class variations; efficient projection-based classification scheme; efficient projection-based feature-extraction scheme; soft decisions; multisource data analysis; medium-sized database; very-low-dimensional feature vectors; image-recognition tasks

Class Codes: A4230S (Pattern recognition); A0210 (Algebra, set theory, and graph theory); B6140C (Optical information, image and video signal processing); B0230 (Integral transforms); B0290H (Linear algebra); C1250 (Pattern recognition); C5260B (Computer vision and image processing techniques); C1130 (Integral transforms)

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34/5/37 (Item 7 from file: 2) DIALOG(R)File 2:INSPEC

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5599960 INSPEC Abstract Number: A9714-9575-007, C9707-7350-007

Title: A realistic model for point-sources imaged on array detectors: the model and initial results

Author(s): Merline, W.J.; Howell, S.B.

Author Affiliation: Planetary Sci. Inst., Tucson, AZ, USA

Journal: Experimental Astronomy vol.6, no.1-2 p.163-2

Publisher: Kluwer Academic Publishers,

Publication Date: 1995 Country of Publication: Netherlands

CODEN: EXASER, ISSN: 0.922-6435

SICI: 0922-6435(1995)6:1/2L.163:RMPS;1-Y

Material Identity Number: N507-96001

Language: English Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: We have constructed a computer model for simulation of point-sources imaged on two-dimensional detectors. An attempt has been made to ensure that the model **produces** "data" that mimic real data taken with 2-D detectors. To be realistic, such simulations must include randomly **generated** noise of the appropriate type from all sources (e.g. source, background, and detector). The model is generic and accepts input values for parameters such as pixel size, read noise, source magnitude, and sky brightness. Point-source profiles are then **generated** with noise and

detector characteristics added via our model. The synthetic data are output as simple integrations (one-dimensional), as radial slices (two-dimensional), and as intensity-contour plots (three-dimensional). Each noise source can be turned on or off so that they can be studied separately as well as in combination to yield a realistic view of an image. This paper presents the basic properties of the model and some examples of how it can be used to simulate the effects of changing image position, image scale, signal strength, noise characteristics, and data reduction procedures. (21 Refs)

Subfile: A C

Descriptors: astronomical instruments; astronomical photometry; astronomy computing; CCD image sensors; digital simulation; optical images

Identifiers: point-sources; array detectors; simulation; two-dimensional detectors; randomly generated noise; pixel size; read noise; source magnitude; sky brightness; radial slices; integrations; intensity-contour plots; noise source; image position; image scale; signal strength; data reduction procedures

Class Codes: A9575D (Astronomical photographic and electronic imaging, and photometry); A9575P (Mathematical and computer techniques in astronomy); A4230 (Optical information, image formation and analysis); A9555S (Auxiliary and recording instruments in astronomy); C7350 (Astronomy and astrophysics computing)

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34/5/38 (Item 8 from file: 2)

DIALOG(R) File 2: INSPEC

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5586390 INSPEC Abstract Number: B9707-6140C-018

Title: Vector -based postprocessing of MPEG-2 signals for digital TV-receivers

Author(s): Blume, H.; Amer, A.; Schroder, H.

Author Affiliation: Inst. for Commun. Tech., Dortmund Univ., Germany Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.3024, pt.2 p.1176-87

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 1997 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(1997)3024:2L.1176:VBPM;1-C

Material Identity Number: C574-97064

U.S. Copyright Clearance Center Code: 0 8194 2435 8/97/\$10.00 Conference Title: Visual Communications and Image Processing '97

Conference Sponsor: SPIE; Soc. Imaging Sci. & Technol.; IEEE Circuits & Syst. Soc

Conference Date: 12-14 Feb. 1997 Conference Location: San Jose, CA, USA

Language: English Document Type: Conference Paper (PA); Journal Paper (JP)

Treatment: Practical (P)

Digital transmission of video signals and block-based Abstract: coding/decoding schemes produce artifacts which become worse with decreasing MPEG-2 data rates. Therefore the reduction of MPEG-artifacts becomes important for digital TV-receivers. On the other hand another important feature for digital receivers is the performance of their postprocessing techniques such as object recognition, motion estimation, -based upconversion and noise reduction on MPEG-signals which are decoded in a receiver-based module called the `set top box'. In this paper different models dealing with the interaction between the `set top box' and digital receiver are discussed. Hereby the influence of MPEG-artifacts on postprocessing methods is studied and methods for combining MPEG-2 decoding, artifact removal and postprocessing are presented. A vector -based upconversion algorithm which applies nonlinear center weighted median filters (CWM) is presented. Assuming a 2-channel model of the system (HVS) with visual different spatio temporal characteristics, errors of the separated channels can be orthogonalized and

avoided by an adequate splitting of the spectrum. Hereby a very robust vector error tolerant upconversion method which significantly improves the interpolation quality is achieved. This paper describes also a concept for temporal recursive noise and MPEG-artifact filtering on TV images based on visual noise perception characteristics. Different procedures in the spatial subbands lead to results well matched to the requirements of the human visual system. Using a subband-based noise filter temporally non correlated MPEG-artifacts can significantly be reduced. Image analysis using object recognition for video postprocessing becomes more important. Therefore a morphological, contour-based multilevel object recognition method which even stays robust in strongly corrupted MPEG-2 images is also introduced. (13 Refs)

Subfile: B

Descriptors: decoding; digital television; filtering theory; interference suppression; interpolation; mathematical morphology; median filters; motion estimation; nonlinear filters; object recognition; television receivers; video signal processing; visual perception

Identifiers: vector -based postprocessing; MPEG-2 signals; digital TV-receivers; digital transmission; video signals; block-based coding/decoding; postprocessing techniques; object recognition; motion estimation; vector -based upconversion; noise reduction; MPEG-artifacts; nonlinear center weighted median filters; 2-channel model; human visual system; spatio temporal characteristics; vector error tolerant upconversion method; interpolation quality; temporal recursive noise; subband-based noise filter; morphological contour-based multilevel object recognition

Class Codes: B6140C (Optical information, image and video signal processing); B6420D (Radio and television receivers); B6120B (Codes); B1270F (Digital filters); B0290F (Interpolation and function approximation) Copyright 1997, IEE

34/5/42 (Item 12 from file: 2)

DIALOG(R) File 2:INSPEC

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04125072 INSPEC Abstract Number: B9205-6140C-076, C9205-5260B-059

Title: Real-time model-based tracking combining spatial and temporal features

Author(s): Roberts, K.; Nashman, M.

Author Affiliation: Robot Syst. Div., Nat. Inst. of Stand. & Technol., Gaithersburg, MD, USA

Journal: Journal of Intelligent and Robotic Systems: Theory and Applications vol.5, no.1 p.25-38

Publication Date: Feb. 1992 Country of Publication: Netherlands

CODEN: JIRSES ISSN: 0921-0296

Language: English Document Type: Journal Paper (JP)

Treatment: Theoretical (T)

Abstract: The paper describes a method for tracking moving image features by combining spatial and temporal edge information with model-based feature information. The algorithm updates the two-dimensional position of object features by correlating predicted model features with current image data. The results of the correlation process are used to compute an updated model. The algorithm makes use of a high temporal sampling rate with respect to spatial changes of the image features and operates in a real-time multi-processing environment. Preliminary results demonstrate successful tracking for image feature velocities between 1.1 and 4.5 pixels every image frame. (23 Refs)

Subfile: B C

Descriptors: computer vision; computerised pattern recognition; computerised picture processing; real-time systems; tracking

Identifiers: model based feature tracking; spatial features; 2D position; computer vision; temporal features; moving image features; edge information; correlation process; temporal sampling rate; real-time

Class Codes: B6140C (Optical information and image processing); C5260B (Computer vision and picture processing); C1250 (Pattern recognition)

(Item 13 from file: 2)

DIALOG(R) File 2: INSPEC

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INSPEC Abstract Number: C91053420 03944286

graphical modeling system for interactive Title: A three-dimensional constraints

Author(s): van Emmerik, M.J.G.M.

Author Affiliation: Fac. of Ind. Design Eng., Delft Univ. of Technol., Netherlands

Conference Title: CG International '90. Computer Graphics Around the p.361-76 World

Editor(s): Chua, T.S.; Kunii, T.L.

Publisher: Springer-Verlag, Berlin, Germany

Publication Date: 1990 Country of Publication: West Germany x+606 pp.

ISBN: 3 540 70062 5

Conference Sponsor: Inst. Syst. Sci

Conference Date: 25-29 June 1990 Conference Location: Singapore

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Presents an interactive ${\it graphical}$ system for ${\it modeling}$ three-dimensional objects. An object can be specified by a graphical interface or alternatively, by entering a **textual description**. Both interface styles are integrated in a graphical programming environment. Geometric relations between objects are specified by constraints between local coordinate systems. The user can define constraints graphically and constraints are evaluated in real-time. The **combination** manipulation interface and a procedural modeling language combination of a direct possible to define and modify parametrized part hierarchies graphically. (22 Refs)

Subfile: C

Descriptors: computer graphics; interactive systems; programming environments; solid modelling

Identifiers: interactive graphical modeling; three-dimensional objects; graphical interface; textual description ; graphical programming environment; constraints; direct manipulation interface; procedural modeling language

Class Codes: C6130B (Graphics techniques)

(Item 15 from file: 2) 34/5/45

DIALOG(R)File 2:INSPEC

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03451608 INSPEC Abstract Number: C89052938

Title: Recognition of textured images using model -based features selected via synthesis

20 20 40 30 400

Author(s): Khotanzad, A.

Author Affiliation: Dept. of Electr. Eng., Southern Methodist Univ., Dallas, TX, USA

Conference Title: Robotics and Automation. Proceedings of the IASTED International Symposium p.18-22

Editor(s): Hamza, M.H.

Publisher: ACTA Press, Anaheim, CA, USA Publication Date: 1987 Country of Publication: USA

ISBN: 0 88986 116 1

Conference Date: 27-29 May 1987 Conference Location: Santa Barbara, CA, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Theoretical (T)

set of stochastic-model-based features suitable for Α of textured images and an efficient method for their classification selection are presented. A class of spatial interaction random field models, called simultaneous autoregressive (SAR) models, is used for texture characterization in a local neighborhood N. The parameters of the fitted to the image are estimated using a maximum likelihood approach and these estimates are selected as textural features denoted by f/sub N/. Selection of an N which would yield good features is done through a synthesis procedure. SAR features are generative, i.e. they can generate an image through a synthesis process. This image is a visual display of the information captured by the corresponding features from the original image. Discrimination power of f/sub N/ is evaluated by visually comparing synthesized images of different texture types. If dissimilar, the selected features do possess strong classification power. Otherwise, the features have large overlaps and N needs to be changed. Starting with a preselected N, such an evaluation and modification process is carried out until a single satisfactory N or a combination of different Ns is found. The procedure is tested using a database of nine different types of natural textures. The selected features in conjunction with a weighted distance classifier yielded 98% correct classification rate. (7 Refs)

Subfile: C

Descriptors: pattern recognition; picture processing; probability; statistical analysis

Identifiers: simultaneous autoregressive models; image recognition; textured images; synthesis; stochastic-model-based features; classification; spatial interaction random field models; maximum likelihood approach; database; natural textures

Class Codes: C1250 (Pattern recognition); C1140Z (Other and miscellaneous)

34/5/46 (Item 16 from file: 2)

DIALOG(R) File 2: INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

02854585 INSPEC Abstract Number: C87019578

Title: The DSSD information/communication date model

Author(s): Higgins, D.A.

Conference Title: Tooling Up for the Software Factory. Feedback '86: DSSD User's Conference p.6/1-18

Publisher: Ken Orr & Associates, Ropeka, KS, USA

Publication Date: 1986 Country of Publication: USA 266 pp.

Conference Date: 7-9 Oct. 1986 Conference Location: Overland Park, KS, USA

Language: English Document Type/Conference Paper (PA)

Treatment: General, Review (G); Practical (P)

Abstract: While several different graphic data modeling tools have appeared in the last few years the data structures systems development (DSSD) method (also popularly known as the Warnier/Orr method) uses a unique data model It is called the information/communication (IC) data model and is used to depict actors, objects, messages, and events in an organization. As a tool for planning and requirements definition, the IC data model provides a useful communication method for clients and systems developers. (1 Refs)

Subfile: C

Descriptors: software engineering; systems analysis

Identifiers: information/communication data model; graphic data modeling tools; data structures systems development; DSSD; Warnier/Orr method; actors; objects; messages; events; IC data model; communication method

Class Codes: C0310F (Software development management); C6100 (Software techniques and systems)

34/5/52 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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01605766 20020204093

Multisensor data classification with dependence trees
Piardi, A; Melgani, F; Serpico, SB; Datcu, M
Dept. of Biophys. & Electron. Engng., Genoa Univ., I
Image and Signal Processing for Remote Sensing VI, 27-29 Sept. 2000,

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File 696:DIALOG Telecom. Newsletters 1995-2004/Nov 02
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File 621: Gale Group New Prod. Annou. (R) 1985-2004/Nov 03
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-33/5,K/1 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

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01888410 05-39402

USE FORMAT 9 FOR FULL TEXT

Mining meets the Web

Zorn, Peggy; Emanoil, Mary; Marshall, Lucy; Panek, Mary

Online v23n5 PP: 16-28 Sep/Oct 1999 CODEN: ONLIDN ISSN: 0146-5422

JRNL CODE: ONL

DOC TYPE: Journal article LANGUAGE: English LENGTH: 9 Pages

SPECIAL FEATURE: Charts References

WORD COUNT: 4480

ABSTRACT: Most companies track sales, marketing and other financial data in large databases, often referred to as data warehouses. The use of data mining technologies has been the standard choice for retrieval of information from these types of databases, and its use is expanding. Data mining can be defined as analyzing the data in large databases to identify trends, similarities, and patterns to support managerial decision making. Data mining models fall into three basic categories: classification, clustering, and associations and sequencing. Applying text mining technologies to Web content may be the answer that everyone has been waiting for to providing some measure of standardization to accessing information on the Web. The application of text mining in Web search engines is emerging and promises to provide more accurate and consistent access to specific or comprehensive results. Text mining, knowledge management, and search engines vendors are developing products for this type of Web searching.

GEOGRAPHIC NAMES: US

DESCRIPTORS: Data mining; World Wide Web; Information retrieval; Product development; Software industry; Manycompanies

CLASSIFICATION CODES: 9190 (CN=United States); 5200 (CN=Communications & information management); 7500 (CN=Product planning & development); 8302 (CN=Software and computer services)

...TEXT: HTML pages and other unstructured documents, documents and other data residing on corporate networks, etc.) to be **combined** and "normalized" into one central searching repository. The Dataware II Knowledge Management Suite provides users with the ability to locate information, regardless of its source, using one **unified** searching interface. For information stores that are secured, Dataware uses LDAP (lightweight directory access protocol) to respect...

... Warehouse, if structure exists, it is mapped to the existing taxonomy, if possible, or new categories are created if appropriate. For Web sites containing completely unstructured data like HTML pages, the Knowledge Crawler is used...

... data or text mining technology available with this version of the Dataware products most closely resembles the classification model of data mining.

Once this data normalization process is complete, the Dataware II Knowledge Query Server provides a searching...

33/5,K/7 (Item 7 from file: 15)
DIALOG(R)File 15:ABI/Inform/R)

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00160361 82-01922

Graphics System Displays/True 3D Images

Stover, Hank

Mini-Micro Systems v14n12 PP: 121-123 Dec 1981 ISSN: 0364-9342

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      2907851 VECTOR? OR COORDINATES OR PATH? OR LOCAT? OR ADDRESS? OR P-
S11
            LACE? OR POSITION? OR LOCAL?
      1895063 CONCATENAT? OR CONNECT? OR LINK? ? OR COMBINE? OR RELATE? -
S12
            OR RELATING OR MATCH?
      101733
               S1 (3W) S2
S13
S14
        8940
               S4 (3W) S5
S15
        6235
               S4 (3N) S6
S16
        8523 S5 (3N) S6
       22248 S5 (3N) S7
S17
S18
       15982 S6 (3N) S10
       21782 S7 (3N) S10
S19
S20
       2291 S18 (S) S11
        3092
               S19 (S) S11
S21
S22
           7
               S8 (S) S9 (S) S20 (S) S16
               S8 (S) S9 (S) S21 (S) S17
S23
          12
S24
               S12 (S) (S1 (3N) S20) (S) (S1 (3N) S21) (S) (S8 (3N) S10 (-
           0
            3N) S11)
S25
           0
               S13 (S) S14 (S) S15 (S) S16 (S) S17
           0
               S22 (S) S14
S27
           4
               S22 (S) S13
                                               4 4 4 4 4 4 4
           7
S28
               S22 (S) S16
S29
          2
               S22 (S) S17
S30
          19
               S22 OR S23 OR S27 OR S28 OR S29
               S30 NOT PY>2001
S31
          11
S32
          11 S31 NOT PD>20010510
S33
          11 RD (unique items)
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